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FEDERAL GRANTS AND FEDERAL EXPENDITURES

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IN recent years there has been considerable interest in the geographic distribution of federal expenditures. In part this interest arises from current issues in federal-state fiscal relations and, more particularly, from issues surrounding federal grants-in-aid.

Federal Grants-In-Aid and Federal Taxes

Two conflicting criticisms have run through the public debates on federal grants-in-aid.

The first is: "Grants are only a round-trip-ticket to Washington. The money comes from the taxes of the people in my state, and it is costly and unnecessary to have it travel to Washington and then back again." [1]

The second criticism: "My state pays more in taxes than it gets back in grants. The Federal grant-in-aid is not necessarily a bargain; . . . each dollar of Federal grants will cost my state more than a dollar in federal taxes."

The round-trip-ticket. The round-trip-ticket criticism basically assumes a distribution of federal aids on a tax-sharing basis and that states could impose the same taxes as levied by the federal government.

What types of federal revenues are shared with states or localities? They are very specialized fees and public domain land receipts which are relatively small in aggregate amount. Such sharing arrangements pertain largely to public domain lands. In the fiscal year 1953 the federal government paid to states and local governments in the form of shared revenues, mainly from the sale of federal property, products and services, the sum of $45.4 million. Of this total, three programs—the national forests funds, the mineral leasing acts, and the revested Oregon and California grant lands—accounted for $42.3 million or 93.3 per cent [2]. The federal

* The author is an economist in the U. S. Public Health Service. The views expressed are her own and do not necessarily reflect the position of the Public Health Service.

This article is an expansion of a paper delivered before the Research Section of the National Association of Tax Administrators, 25th Annual Meeting June, 1957, Poland Springs, Maine. The basic statistical materials are those included as part of a dissertation submitted in 1956 to the Graduate Faculty of Political and Social Science of the New School for Social Research.

[1] Editorial, "$1 Aid for $2.32 Taxes," *New York Times*, July 1, 1955.

[2] Commission on Intergovernmental Relations, Study Committee, *Payments in Lieu of Taxes and*

(See next page)

programs that are criticized as a round-trip-ticket are not, of course, these shared revenue programs, but the welfare, health, highway, education and housing grants.

The second assumption centers on the question: Are the taxes which compose the federal tax structure available to states and localities? In the past two decades, various studies of federal-state tax coordination have explored this question and concluded largely in the negative [3]. Ease of movement across state lines and the volume of interstate transactions are barriers to effective taxation by states of sources readily available to the federal government. State tax competition and potential state tax differentials led, in fact, to federal tax-credit offsets to facilitate state use of estate and unemployment compensation levies.

The round-trip-ticket criticism ignores the specific grant objectives. Federal aids are designed to encourage or stimulate states to develop or expand public services deemed essential to the national welfare. Such aid is designed to safeguard state and local administration, while at the same time through federal support, to establish at least a minimum program standard consistent with the national interest.

Federal grants are allocated not in accord with place of tax origin, but on the basis of relative need for the public service and, in several newer grant programs, the relative capacity of states to meet this need. Need for a public service in a state is patently not related to the federal tax burdens. Various examples may be cited to show the differences between a state's tax payments on one hand, and its concentrations of public assistance recipients, classroom shortages, public health problems, hospital bed requirements, and disabled persons on the other hand. Indeed, in view of the importance of income taxes in the federal tax system, an inverse rather than a direct relationship may often be expected between program need and federal tax payments.

Because the variations in capacity among the states often led to widely divergent program performance, it became necessary to incorporate a measure of relative capacity as well as relative need in grant allocations. Accordingly, a number of post-World War II grant programs have been designed so that they are more effective than earlier grants in recognizing state capacity differences. Formulas in these newer programs have moved closer toward achievement of the twin objectives of equalization—a uniform minimum nationwide program level and uniform fiscal effort from state to state to support such a minimum program. It is intended that state and local governments will build upon these minimum standards in response to local variations in services needed and desired.

One part of the round-trip-ticket criticism, which might be mentioned in passing, is the charge of a " rake-off " for purposes of administration. Administrative costs of grant programs are difficult to define and assess in a consistent way from program to program. The variable scope of administrative costs—as Mr. Labovitz has pointed out in a recent study—requires " a detailed and specific system of cost accounting and reporting." In the absence of such a system, costs must be prorated from

Shared Revenues, Washington, U. S. Government Printing Office, June 1955. 197 pp.

[3] Statement of Joint Conference of Representatives of the Congress of the United States and of the Governors' Conference, September 27, 1947. *State Government,* November 1947, p. 299.

overhead, rentals, retirement system contributions, tax collection expenses, etc.[4]

Mr. Labovitz, in his study of nine grant programs accounting for over 80 per cent of all federal grant expenditures, employed a broad or inclusive concept of administrative expenses. For the grant programs examined, the total of directly related federal expenditures for administration and other associated activities was $36.1 million in 1956; the total was estimated to rise to $40.6 million in 1957, and to $48.8 million in 1958. These sums represent slightly more than 1 per cent of the amount of grant payments to state and local governments. If one includes, in addition, the prorated costs of federal tax collection and General Accounting Office services, the total of federal administrative expenditure is estimated at about 1.6 per cent of the grant expenditures for the selected programs. For the individual grant programs examined, the percentages of direct administrative costs to grant expenditures ranged from one-tenth of 1 per cent in the case of public assistance to between 11 and 13 per cent in the low-rent public housing program.[5]

Federal net tax " drains ". The second criticism of federal grants is that these grants favor some states at the tax expense of others. The grant system is criticized for failing to be a direct tax sharing or a round-trip-ticket system. It is charged that taxes collected in New York or Connecticut, for example, are spent in Mississippi. The implication of this criticism, as Professor Newcomer has emphasized, is that a state which pays the tax has a vested right to the proceeds [6].

To grant funds to the states in relation to where federal taxes originated as checks written, bank funds withdrawn, receipts of Internal Revenue collectors, or as tax burdens on income recipients—different places in many instances—would not be consistent with relative state needs for public services. The need for public services and the level of federal tax payments are often inversely rather than directly related, as indicated earlier.

From the earliest beginnings of nonland grants, federal allotments to states were made according to need. For example, benefits under the program of grants to the American Printing House for the Blind, initiated in 1879 to stimulate the manufacture and distribution of books and other instructional materials for the blind, were allocated to states according to the number of pupils in public institutions for the education of the blind. In general, 19th century and early 20th century grants were distributed among states either as a uniform amount per state or as a uniform amount per person in the states, and not in accord with federal tax payments.[7]

The criticism that federal grants favor some areas at the expense of others has grown with the increased use of equalization provisions in grant programs. Such provisions call for larger grant allotments or higher federal

[4] Labovitz, I. M., *Federal Expenditures Associated With the Administration of Programs of Grants-in-Aid to State and Local Governments*, Legislative Reference Service, Library of Congress, April 17, 1957, 34 pp.

[5] *Ibid.*

[6] Newcomer, Mabel, " Critical Appraisal of Federal and State Aid." In *Federal-State-Local Tax Correlation*. Symposium Conducted by the Tax Institute, December 3-4, 1953, Princeton. Tax Institute, 1954, pp. 91-100.

[7] Johnson, Byron L., *The Principle of Equalization Applied to the Allocation of Grants-in-Aid*, Bureau of Research and Statistics Memorandum No. 66, Washington, Social Security Administration, September 1947, 225 pp.

matching in states with lower incomes. While the argument that "my state is losing money" is not exclusively directed at equalization grants, equalization provisions have increased the differentials between estimated grant "take" and federal tax "drain" by widening the differences in grant allocations among states.

In recent years, the Congress increasingly has recognized that in situations where large expenditures are required to provide essential public services, federal grant funds should be distributed in larger proportion to states which have the greatest need for the services and the least financial capacity to provide them. The Commission on Intergovernmental Relations, after its study of the federal grant system, reported to the President and the Congress as follows: "During the past decade . . . the grant structure has been modified to recognize varying state fiscal capacity. In grants for hospital construction, school lunches, and public health, for example, the National Government assumes more of the financial burden in States of lesser fiscal capacity than in more prosperous ones . . . Where disparities in fiscal capacity make it unlikely that the grant's objective will be attained in low-income States without an equalizing formula, it seems only reasonable to grant more funds in relation to program need".[8] The federal-state relations task force report of the earlier Hoover Commission similarly endorsed the principle of variations in grants inversely with fiscal capacity of the states.[9]

The Congress and study commissions have favored federal equalization grants because of the unfavorable experience under earlier uniform or uniform per capita grants. They have favored these provisions because they tend to maximize the effectiveness of limited amounts of federal support in achieving nationwide program levels by putting more funds in states where the need is greatest and financial capacity least.

Recent discussions on equalization aids have sharpened two issues which are of interest since they demonstrate the need for a statistical series on federal expenditure distributions by state. These issues are equalization of state income or equalization of program financing, and efficiency in use of national resources.

Equalization through taxation. A public debate has developed among the advocates of a federal program of school construction. This debate centers on whether or not flat per capita grants are equalization grants. The image of uniform grants as equalization grants is created by the mirror of the interstate income equalization under a uniformly applied progressive federal tax structure.

This imagery can be best explained by the long history of advocacy by educators of the application of the equalization principle, familiar in state-local relations, to federal grants to states. Much of the early research and study of equalization aid is attributable to education groups and their concern with achieving basic or foundation education programs through state and federal aids. John Norton, Paul Mort, and Leslie Chism—all pioneers in measurement of relative state capacity as a

[8] Commission on Intergovernmental Relations, *A Report to the President for Transmittal to the Congress*, Washington, U. S. Government Printing Office, June 1955, 311 pp.

[9] Council of State Governments, *Federal-State Relations;* a Report prepared for the Commission on Organization of the Executive Branch of the Government, 81st Cong., 1st Sess., Senate Document No. 81, 297 pp.

basis for federal aids—are educators. Mabel Newcomer's classic work, *An Index of the Taxpaying Ability of State and Local Governments,* was published by Teachers College of Columbia University.

Within the context of this history, it is easier to understand an educator placing the label "equalization" on proposals to distribute a major portion of federal funds on a uniform grant per school-age child basis. It is easier to understand such a statement as, "There are honest differences of opinion about what is truly 'distribution to the states according to need,'" and the statement that equalization "is inherent in the federal tax system." "Many proponents of federal funds for school construction have disregarded the effects of federal tax system." [10]

This new meaning of equalization grants substitutes the objective of equalization of incomes among the states via federal taxes for the grant objectives of equalization of minimum public service program levels and equalization of state and local taxing burdens to finance these minimum program levels.

Federal grant-in-aid objectives are not directed to equalization of state income. As Howard Schaller, in his 1955 study of *Federal Grants-in-Aid and Differences in State Per Capita Incomes,* indicated after summarizing the purposes of federal grants: "Neither purpose is directed specifically toward the reduction of the per capita income differences among the 48 states".[11]

Equalization of state income and equalization of minimum program levels, paralleled by more uniform state and local taxing effort, are two different things. Moreover, they have different purposes. The design of federal grants to achieve a national minimum program level, without requiring disproportionate state and local tax burdens, needs to be considered without being confused with equalization of state income.

In fact, state income redistribution—to the extent that it occurs through the operation of the federal tax system—is a coincidental result. It is largely a byproduct of the application of progressive federal income tax rate, on unequal income structures in the states. Equalization grants have been designed by the Congress to achieve the purposes of the aided program whether it be building of needed medical facilities or rehabilitation of the disabled. There is as a byproduct some interstate income redistribution, but as in the case of federal taxes the redistribution is an incidental effect rather than a direct objective.

This is not to say federal taxing, on the one hand, or federal grant policy on the other, have no meaning for state income and fiscal capacity. Federal taxes, and federal grants in far lesser degree, affect states and their taxing potential. It is at this point that the interstate redistribution must be considered. Federal grants in the form of transfer payments to public assistance recipients or of salary payments to public health nurses, vocational education teachers, etc. are included in state income. Variable federal grants thus are reflected in some narrowing of interstate income differences. Interstate income redistribution resulting from federal taxes is not now fully taken into account. A correction of state income figures for federal tax payments has

[10] Fuller, Edgar, "Paying for Schoolhouse Construction," *Nation's Schools,* January 1957, pp. 73-78.

[11] Schaller, Howard G., "Federal Grants-in-Aid and Differences in State Per Capita Incomes, 1929, 1939, and 1949," *National Tax Journal,* September 1955, pp. 287-299.

been suggested for some time.[12] Basically such an adjustment waits upon the development by the Department of Commerce of an income series appropriately adjusted for federal tax withdrawals. Statistical studies of this adjustment indicate, however, that the interstate redistribution resulting from federal taxes is not so large that the relative positions of the state are affected markedly.[13] The adjustment of state income for federal individual income tax withdrawals appears to have a negligible effect on the state income figures as they are used in grant-in-aid formulas.[14]

Grants and allocation of resources. Theoretical positions recently advanced by economists on the subject of equalization aids run the gamut from the contention that such grants tend to impair the efficient allocation of economic resources to the contention that these grants help to correct a distortion in such allocations. Professor A. D. Scott of the London School of Economics argues that equalization grants-in-aid impair the allocation of resources. More specifically, geographic transfer of taxes from richer states to provide "amenities to poor people in resource-poor states," he says, will deter labor mobility and " thus prevent the maximisation of national production." These amenities are " largely social services and thus, through their impact upon the lower-income workers distort the supply of labor in the various areas toward relatively excessive supply just where productivity is least." [15]

Professor James M. Buchanan of Florida State University takes a different position. He argues that equalization grants " cannot be rejected for efficiency reasons." He says that equity, national interest, and the achievement of minimum standards of public services should be the primary trinity of motives for federal grant transfers. Professor Buchanan continues his analysis with a discussion of the tendency of state and local taxes to be higher in poorer states, and benefits from state and local services to be lower than in wealthier states. This, according to Buchanan brings a distortion of resource allocation. Unless a remedy such as equalizing federal grants is applied to hold the resources in the poorer states, there will be movement to the high income states. Only in this way can the fiscal system be neutral " in a geographic sense." [16]

Although these points of view appear at first to differ considerably and to suggest different grant policies, essentially the major differences stem from the use of the term " poor." Professor Scott uses the word to mean an area with relatively scarce natural and other resources; Professor Buchanan means an area with relatively low current income. Experience with state-local grant policies documents the need for concern lest funds made available in a local area de-

[12] Wueller, Paul H., *Elements of a Variable-Grant Formula*, Bureau of Research and Statistics Memorandum No. 54, Washington, Social Security Board, November 1943, 22 pp.

[13] U. S. Department of Commerce, Office of Business Economics, *Personal Income by States Since 1929*, A supplement to the Survey of Current Business, Washington, U. S. Government Printing Office, 1956, pp. 29-30.

[14] Mushkin, Selma, and Crowther, Beatrice, *Federal Taxes and the Measurement of State Capacity*, Washington, Public Health Service, U. S. Department of Health, Education, and Welfare, May 1954, 91 pp.

[15] Scott, A. D., " A Note on Grants in Federal Countries," *Economica* pp. 416-422, November 1950. *See also* " Federal Grants and Resource Allocation," *Journal of Political Economy*, December 1952, pp. 534-536.

[16] Buchanan, James M., " Federal Grants and Resource Allocation," *Journal of Political Economy*, June, 1952, pp. 208-217.

ter a desirable population out-migration. In the United States, however, few if any states are so small in size as to be stripped of resources in the same way that some local communities have been stripped of supporting industry because of depletion or obsolescence. Differences in the indexes of state capacity used for grant purposes are related to relative current income levels and not to underlying basic resources. Many low-income states have demonstrated they have sufficient natural resources to justify the immigration of capital and enterprise.[17] Moreover, as at least two reviews of this controversy have indicated, the amounts of income transferred through grants and the relief of state and local fiscal pressures have not been very great.[18]

Purposes of the study. These several criticisms, in varying degrees, are based on the relationship of the geographic distribution of federal taxes and the geographic distribution of grants. Relative net grant " takes " or net tax " drains " are measured by comparing all federal grants in a state or allocations under a specific grant program with estimated federal taxes incident or paid in the state. All too frequently, total federal taxes are compared with the 4 cents or so of each federal tax dollar going out to the states in grants. But even in more careful comparisons it is assumed that each $1 of federal grants would be financed by the same complex of federal taxes as compose the total federal tax bill. Marginal tax changes to finance new aid proposals have not been considered.

Information on the state distribution of all federal expenditures should help clarify the issues underlying these several criticisms of federal grants in general and equalization aids in particular. An obvious question is: How does the state-by-state distribution of federal grants compare with the distribution of all federal expenditures for which federal taxes are imposed? Do federal tax dollars go in larger number to the poorer, or to the higher income states? Is there in the aggregate a return of federal tax dollars to their states of origin? Do federal taxing and spending processes result in a net interstate income redistribution? Is the regional income redistribution implicit in the federal tax system offset by the regional distribution of federal expenditures?

A single set of estimates cannot provide the information needed to answer these questions. Nor is a single set of estimates of federal expenditures likely to be well designed to meet the many other purposes for which state expenditure distributions have been sought.

Measuring Federal Expenditures in the States

There is no " correct " way of distributing or allocating federal expenditures among the states. The types of expenditures distributed, and the bases on which they are distributed essentially depend upon the purpose of the estimates. There is no simple tabulated series of federal expenditures by states similar to the tabulation of federal tax collections by Internal Revenue District. But even if there were such a series attained by counting, let us say, the amount of federal checks paid initially in each state, it would not be suitable for measuring employment impacts in a state, impacts on consumption,

[17] These considerations, however, do not lessen the problem of maximum efficiency in use of Federal revenues.

[18] Maxwell, James A., " The Equalizing Effects of Federal Grants," *Journal of Finance,* May 1954, pp. 209-215. *See also* Schaller, Howard G., *op. cit.*

changes in distribution of income, or benefits received by the state residents. For example, the payment of a check in Delaware to a business office of a large corporation may represent payment for goods produced in another state. Subcontractors and factories producing the unfinished materials going into the procurement item may be located in still other states. A check paid to a land-grant college in Iowa may help finance, in part at least, education of a resident of New Jersey. Checks paid in Maryland to scientists working at the National Institutes of Health on heart or cancer diseases are not of exclusive benefit to residents of Maryland.

There is some analogy between the allocation of expenditures and the allocation of federal taxes. In the case of tax payments a distinction is usually made between collections and incidence and these two, in turn, are distinguished from the ultimate economic effects of the tax. Similarly a distinction may be made between the place where a government check is received initially and the ultimate recipient or beneficiary of the payment. Moreover, these flows may be distinguished from the intermediate and long-run economic effects of the expenditures.

Some of the methodological problems in measuring the state-by-state distribution of federal expenditures are summarized briefly below. A more detailed discussion is contained in an article in the *Review of Economics and Statistics*.[19] The supplementary documentation is presented in a paper entitled *Statistical Materials on the Distribution of Federal Expenditures among the States*, duplicated by the U. S. Public Health Service in 1956.[20]

Two concepts of geographic distribution. The location of those who benefit from federal outlays in terms of the program purposes or beneficiary groups must be distinguished from the place where federal outlays flow as dollar payments initially, or over a longer period. The first of these measures may be termed a benefit measure, the second a dollar-flow measure. In the benefit measure, emphasis is placed principally on determining who benefits from the services and where the recipients of public services are located. In contrast, a dollar-flow measure is designed to trace funds from taxpayers to federal employees, to individuals and families receiving welfare payments, to holders of the public debt, and to those who produce the goods and services which go into the commodities purchased by the federal government. In a dollar-flow measure military payrolls, for example, would be attributed to the states in which the payments are made to members of the armed forces. In a benefit measure these payrolls would be considered as a part of the national security expenditures made on behalf of citizens in all states to protect our way of life. The national security program is not designed to benefit members of the armed forces—instead it calls upon a citizen army to serve in defense of the people of all states of the union.

There have been a few studies of distribution of federal expenditures in particular states or regions. George W. McKinney undertook a study of federal taxing and spending in Virginia.[21]

19 Mushkin, Selma, "Distribution of Federal Expenditures Among the States," *Review of Economics and Statistics*.

20 Mushkin, Selma, *Statistical Materials on the Distribution of Federal Expenditures Among the States*, Washington, Public Health Service, U. S. Department of Health, Education, and Welfare, 1956, 79 pp.

21 McKinney, George Wesley, Jr., *Federal Taxing*

(See next page)

The Federal Reserve Bank of Boston analyzed federal cash payments and federal cash receipts, including borrowing, and currency and banking transactions for the New England Region.[22] Norman H. Jones, in a doctoral dissertation at Iowa State University, analyzed by geographic region the relationships of federal taxes and expenditures.[23] While the studies differ in scope each attempts to measure expenditures as dollar-flows rather than as benefits flowing to the people in the form of public services.

Much more extensive theoretical work has been done in connection with studies of redistributive effects of budgetary financing among income groups. Perhaps the most extensive theoretical exploration is contained in Tibor Barna's *Redistribution of Incomes Through Public Finance in 1937*—a quantitative investigation into redistribution in England before World War II.[24] Another volume of special interest is *Income Redistribution and Social Policy* edited by Alan T. Peacock.[25] This volume contains a set of studies on the nature and magnitude of the redistribution of income brought about by social policies in selected countries; it includes a study on government budgets in the United States by Alfred H. Conrad. In these studies, as well as in similar studies by John Adler[26] and Charles Stauffacher[27], several important theoretical questions are raised: (a) the valuation of government services; (b) the content of government expenditures to be included, e.g., divisible and also indivisible benefits, total budgetary expenditures or social expenditure costs, etc.; (c) the basis of attributing government services to income groups. Except for the Stauffacher article, these studies analyze government expenditures as benefits rather than dollar-flows. John Adler, in commenting on this problem, wrote: "The money-flow concept is, by implication at least, based on the assumption that the income of government employees, for instance, would be zero if the government did not employ them. This assumption is clearly untenable if we conceive of an economy as anything even vaguely approaching a general equilibrium system in which there are forces tending toward the elimination of such maladjustments as unemployment." [28]

There are underlying conceptual differences between the problem of expenditure allocations to income classes and allocations to geographic regions. Both types of measures—benefits and dollar-flows—appear to have a meaning for geographic distributions. The translation of governmental expenditures into benefits provides a measure of the services received which are additive to

and Spending in Virginia: A Quantitative Study, Advisory Council on the Virginia Economy, June 1950, 58 pp.

22 "Federal Receipts and Expenditures in New England; Their Growth and Significance," *Monthly Review* [Federal Reserve Bank of Boston], August 1950.

23 Jones, Norman Hugh, Jr., *The Regional Impact of Federal Fiscal Policy.* Unpublished Ph.D. dissertation, State University of Iowa, August 1954.

24 Barna, Tibor, *Redistribution of Incomes Through Public Finance in 1937*, Oxford, Oxford University Press, 1945, 289 pp.

25 *Income Redistribution and Social Policy*, Alan T. Peacock (ed.), London, Jonathan Cape, 1954, 296 pp.

26 Adler, John H., "The Fiscal System, the Distribution of Income and Public Welfare," *In Fiscal Policies and the American Economy*, Kenyon E. Poole (ed.), New York, Prentice-Hall, 1951, pp. 359-409.

27 Stauffacher, Charles, "The Effects of Governmental Expenditures and Tax Withdrawals Upon Income Distribution, 1930-39." In *Public Policy*, C. J. Friedrich and Edward S. Mason (eds.), Cambridge, Graduate School of Public Administration, Harvard University, 1941, pp. 232-261.

28 Adler, John, H., *op. cit.*

other consumer goods and services consumed by the public and also quantifies the public services to the beneficiaries in accord with the purposes of the authorizing legislation. While the dollar-flow measure carries with it some implication of government use of idle manpower and resources, it is important to bear in mind that even in a period of high employment there exist resources for further growth in the states—resources which are not fully tapped. These resources include both natural resources and the potential of a better use of manpower within specific areas of the nation, as well as the shift of manpower and industrial capacity among regions.

Definition and classification of expenditures. The choices in classification of expenditures for purposes of regional distribution are of at least two kinds. The overall content of the expenditure figures may be defined as total expenditures shown in the administrative budget, or as total cash expenditures. Total expenditures may be limited to only those representing current costs or may also include property purchases and property transactions. They may be gross expenditures or expenditures net of special receipts such as sales of power. Expenditures of dollar-flows may be broadly defined to include government redemptions of securities and similar transactions. Within this overall content expenditure items may be classified by agency and appropriation items, by general functional area or purpose. They may be classified as transfer payments and exhaustive expenditures with a distinction between direct payments to individuals and payments to business firms, or a special classification may be designed to reflect information available on allocators by state.

The starting point of the estimates presented here is the federal cash budget of 1952—the latest year for which expenditure data were available at the time work was begun. In 1952 the total cash budget amounted to $68.0 billion as compared with administrative budget expenditures of $66.1 billion. Cash revenues that year were about $54 million higher than the cash expenditure amounts. Two sets of estimates were developed, one a benefit measure, the other a measure approximating dollar-flows.

The use of the cash budget resulted in the inclusion of payments from trust funds to the public along with other federal outlays and avoided attributing benefits to states from interagency transfers. Cash budget-item classifications were adhered to fairly closely. This budget-item classification facilitated the use of such agency-by-agency data as existed on state distributions of federal expenditures.

Allocation indexes. The selection of allocators for distribution of expenditures among states depends upon the concept underlying the measure and the data available to match the conceptual framework.

In developing the estimates shown below, federal expenditures of each of the government agencies were allocated separately. While the detail for each of the agencies does not correspond with the detailed budget itemization, in many instances the specific appropriation served as the basic guide in arriving at the allocation detail. The detail also was determined by the nature of the expenditures and the information available on state-by-state operations of the government program.

The various indexes used in distributing federal expenditures among states

may be summarized as follows:

All grants-in-aid are assigned to the states receiving the grants; all transfer payments to individuals, such as social insurance benefits, veterans' payments, and farm subsidies, are assigned to the state in which the recipient resides; all loans are assigned to the states in which the loans are made; power project costs are assigned to the users of the power; research expenditures are assigned on a uniform per capita basis throughout the nation.

International aid, military payroll and procurement costs, expenditures of the Atomic Energy Commission, and interest on the federal public debt—which taken together represent about 65 per cent of the federal cash budget—are allocated on two bases. In the benefit estimate, these expenditures—all part of a defense effort—are assumed to benefit equally people throughout the nation. In the second estimate, termed an incidence measure, the expenditures are traced through to the states in which the types of goods bought by the government are produced, both primary and secondary production effects being taken into account for the military procurement items. To illustrate, expenditures of the Atomic Energy Commission were distributed in proportion to plant and equipment costs incurred by the Commission in each of the states from the inception of the program to June 30, 1953. Military payroll expenditures were distributed to the states in which the wages, salaries and allowances were paid. Estimated disbursements for military procurement were first distributed among industries. The industrial distribution was based on the national input-output data which show for each $1 million of federal military procurement expenditures the amount going directly to farms, mines, shipyards, aircraft plants, steel rolling mills, textile mills, etc., and indirectly to these industries through the purchase of raw materials. These national totals for each industry were allocated among the states in proportion to each state's share of the wage bill in the industry. The industrial wage bill in each state was based on Employment Security data. For industries not fully covered under state employment security programs such as farming, production figures were substituted in determining the percentage distribution among the states.

Underlying this method of allocation of military purchases is the assumption that markets of all firms in an industry are influenced by federal purchases, whether or not individual producers receive a government contract. By way of illustration, let us assume that there are two states each with aircraft plants of the same size. The federal procurement contract is with plants in only one state. All civilian aircraft is produced in the second state. Federal purchases in the one state are assumed to affect the production of the plants in the other. The amount attributed to federal aircraft procurement would be allocated to both states in relation to their size, or in this example, in equal amount.

While this description is generally indicative of the approach used, it may be helpful to give some additional illustrations. For each of the federal agencies and within each agency for each program an attempt was made to determine where the people are located for whom the program is undertaken. Expenditures for programs designed to aid farmers, such as marketing and crop research, were allocated to states in relation to their relative farm or rural populations, or in some instances in pro-

portion to the relative value of classes of aided farming operations, for example, value of wheat farms. Expenditures for veterans' programs were attributed to states in proportion to their relative numbers of aided veterans; expenditures of the Bureau of Indian Affairs in proportion to the Indian population living on Indian reservations. Expenditures of the Securities and Exchange Commission were distributed to states in proportion to income from interest and dividends. Expenses of the Tax Court were distributed in proportion to tax suits commenced in each of the states as shown in the annual report of the Director of the Administrative Office of the United States Courts.

As indicated earlier the detail of the allocation varied from agency to agency depending upon the allocation indexes available and the nature of the program. Three basic sources of information were used: *The Combined Statement of Receipts, Expenditures, and Balances of the United States Government* for the fiscal year 1952, agency annual reports, and hearings before the Appropriation Committees of the Senate and House of Representatives on the fiscal year 1954 appropriation bills. These sources were supplemented by statistical reports of the various federal departments and agencies, by estimates developed for national income purposes by the Office of Business Economics of the Department of Commerce, and by Census data on such items as population, wholesale sales, value added by manufacture, retail trade, etc.

Expenditure Study Findings

What do these findings suggest as approximate answers to the questions raised earlier?

Grants and expenditures compared. How does the state-by-state distribution of all expenditures, for example, compare with the distribution of federal grants? Do federal tax dollars go out in larger number to the low or high income states? There is more uniformity in the amounts received as federal expenditures per capita than in federal grants-in-aid per capita. Grants to states varied in 1952 from $6.83 per capita in New Jersey to $40.42 in Nevada. Per capita benefits from total expenditures varied from a high (omitting the District of Columbia) of $573 in Wyoming to a low of $403 in North Carolina.[29] For about three-fourths of the states the maximum difference is less than $60 per capita (Figure 1). The incidence estimates of the federal expenditure distribution, which approximate the dollar-flow, show a far wider disparity among the states. The variation of the incidence estimates, again omitting the District of Columbia, is from a high of $780 in New Mexico to a low of $240 in North Carolina.

Correlations were computed between per capita federal expenditures and per capita state income, and between per capita federal grants and per capita state income. The correlation coefficients are summarized below:

Correlation of Per Capita Federal Expenditures in the States and Per Capita State Income, Fiscal Year 1952

All Federal Expenditures	
Benefit illustration	+.011
Incidence illustration	+.473
Selected Federal Expenditures	
Federal grants to states	−.082
Public assistance grants	−.257
Federal component of state income	+.170

[29] These figures are not corrected for the budget adjustment to a daily Treasury Statement basis.

While the correlation between per capita incidence of federal expenditures and per capita income is +.473, there is a minor negative correlation between federal grants per capita and per capita income. This comparison, coupled with the relative size of grants and of total federal expenditures, suggests that the negligible equalizing effects achieved by federal grants are more than offset by the federal expenditure dollar-flows. The correlation between per capita federal benefits and per capita income is only +.011, a coefficient which is not significantly different from zero.

As a group, states with incomes above the United States average receive about 49 per cent of federal grants and 57 to 62 per cent of all federal cash expenditures (depending upon the illustrative estimate used). States with incomes below the average receive 51 per cent of the grants but only 38 to 43 per cent of all federal cash expenditures (Table I).

Balance of federal expenditures and revenues. Is there a return of federal revenues to states from which they come? Federal benefits and also expenditure-incidence exceed or are within 10 per cent of estimated federal revenue burdens [30] in about three-fourths of the states (Table II).

When expenditures for national security and related major components of the federal budget are imputed as benefits to states in proportion to their populations, federal benefits are less than estimated federal revenue burdens in the major industrial states. States such as New York, California, Illinois, New Jersey, Ohio, Masachusetts, and Connecticut—with their large populations—account for almost all the estimated net revenue withdrawals in excess of the amount of imputed benefits. New York State alone is estimated to pay about 16 per cent of total federal revenues and about 40 per cent of revenue in excess of federal benefits to the states. When federal expenditures are allocated on an incidence basis, and when expenditures for national security and related programs are distributed according to place of production and employment, the relative positions of some states shift. For others there is little change. New York's and Illinois' relative balance is changed very little, although a somewhat larger percentage of the net excess revenues is estimated for these states. The difference between " take " and " drain " is widened for Pennsylvania. California's position shifts from a net tax paying state to a net receiving state. The relative estimated excess of revenue burdens in Delaware and Connecticut is reduced as compared with the benefit-burden illustration.

In both benefit and expenditure-incidence illustrations the states that are being aided in a comparative sense are primarily the low income states. The largest relative excess of expenditures—amounting to more than three times the revenue burdens—is indicated for Mississippi in the benefit illustration. The largest relative advantage in the burden-incidence comparison is shown for New Mexico.

As a group, states with above average incomes bear 72 per cent of all federal revenue burdens but receive about 60 cents of each $1 of federal expenditures (Table II). The 29 states with incomes

[30] The basis of estimating revenue burdens is presented in Selma Mushkin, *Statistical Materials on the Distribution of Federal Expenditures Among the States.* The incidence assumptions underlying these estimates tend to maximize the state differences in tax burdens.

TABLE I

Federal Grants and Estimated Total Cash Federal Expenditures, by State, Fiscal Year 1952
(Amounts in millions)

States Ranked by 1951-52 Per Capita Income[1]	Federal Grants[2]	Expenditure Illustrations	
		Benefits	Incidence
Continental United States	$2,292	$67,615	$65,712
States with incomes above U. S. average	1,116	38,751	40,412
Delaware	6	147	179
Nevada	7	97	94
District of Columbia	6	611	770
Connecticut	22	842	1,263
New York	163	6,505	6,349
California	189	5,076	6,281
Illinois	103	3,703	3,423
New Jersey	34	2,045	2,376
Ohio	98	3,391	3,620
Michigan	85	2,772	2,628
Washington	56	1,188	1,629
Massachusetts	71	2,073	1,994
Maryland	22	1,010	1,333
Montana	15	305	231
Oregon	26	818	633
Pennsylvania	110	4,562	4,124
Indiana	38	1,666	1,886
Wyoming	9	171	149
Rhode Island	14	353	305
Wisconsin	44	1,416	1,145
States with incomes below U. S. average	1,177	28,862	25,297
Colorado	35	665	583
Kansas	33	854	1,067
Missouri	92	1,802	1,681
Nebraska	21	579	506
Iowa	39	1,073	845
New Hampshire	8	227	144
Minnesota	46	1,295	1,396
Arizona	22	458	371
Utah	17	335	314
Texas	143	3,680	3,553
Idaho	12	311	245
South Dakota	16	335	235
Maine	15	376	326
New Mexico	21	359	558
Vermont	6	159	101
Florida	52	1,318	956
Virginia	34	1,421	1,564
North Dakota	14	315	239
Oklahoma	71	1,082	919
West Virginia	27	865	590
Louisiana	81	1,310	1,114
Georgia	66	1,502	1,137
Tennessee	49	1,493	1,552
Kentucky	47	1,292	1,114
South Carolina	33	904	909
North Carolina	52	1,657	990
Alabama	49	1,372	1,087
Arkansas	37	866	623
Mississippi	37	957	578

[1] Based on average of 1951 and 1952 per capita income from *Survey of Current Business,* August 1953.

[2] From Social Security Bulletin, June 1953.

Note: Amounts may not add to totals because of rounding.

below the United States average get about 40 per cent of federal expenditures but bear 28 per cent of revenue burdens.

The geographic differences in net revenue burdens result primarily from the variation in federal taxes per capita among the states. For the fiscal year 1952 federal tax burdens ranged from $112 per capita in Mississippi to almost ten times that amount, or $1,015 in Delaware, reflecting the operation of federal taxing statutes on the unequal income structures in the states. While in 1952 the per capita income in the highest income state was about 2.8 times that of the lowest income state, there is far wider variation in the distribution of income and sources of income. Census data for 1949—the latest available—indicate for example, that 49 per cent of the families and unrelated individuals in Mississippi had annual incomes under $1,000 as compared with 15 per cent of the families in New Jersey and 18 per cent in New York.

Interstate income redistribution. Differences in concept between state income and the illustrative distributions

TABLE II

PER CENT OF ESTIMATED FEDERAL CASH REVENUES AND EXPENDITURES IN EACH STATE, FISCAL YEAR 1952

States Ranked by 1951-52 Per Capita Income[1]	Revenue Incidence	Expenditure Illustrations	
		Benefits	Incidence
Continental United States	100.00%	100.00%	100.00%
States with incomes above U.S. average	72.03	57.31	61.50
Delaware	.52	.22	.27
Nevada	.19	.14	.14
District of Columbia	1.07	.90	1.17
Connecticut	2.23	1.25	1.92
New York	15.86	9.62	9.66
California	9.00	7.51	9.56
Illinois	7.56	5.48	5.21
New Jersey	4.00	3.02	3.62
Ohio	5.81	5.02	5.51
Michigan	4.59	4.10	4.00
Washington	1.57	1.76	2.48
Massachusetts	4.10	3.07	3.03
Maryland	1.86	1.49	2.03
Montana	.34	.45	.35
Oregon	1.00	1.21	.96
Pennsylvania	7.29	6.75	6.28
Indiana	2.15	2.46	2.87
Wyoming	.17	.25	.23
Rhode Island	.68	.52	.46
Wisconsin	2.05	2.09	1.74
States with incomes below U.S. average	27.97	42.69	38.50
Colorado	.91	.98	.89
Kansas	.94	1.26	1.62
Missouri	2.54	2.67	2.56
Nebraska	.69	.86	.77
Iowa	1.22	1.59	1.29
New Hampshire	.34	.34	.22
Minnesota	1.69	1.92	2.12
Arizona	.41	.68	.56
Utah	.29	.50	.48
Texas	4.04	5.44	5.41
Idaho	.24	.46	.37
South Dakota	.24	.50	.36
Maine	.52	.56	.50
New Mexico	.28	.53	.85
Vermont	.21	.24	.15
Florida	1.77	1.95	1.45
Virginia	1.52	2.10	2.38
North Dakota	.23	.47	.36
Oklahoma	.89	1.60	1.40
West Virginia	.78	1.28	.90
Louisiana	1.13	1.94	1.70
Georgia	1.23	2.22	1.73
Tennessee	1.10	2.21	2.36
Kentucky	1.10	1.91	1.70
South Carolina	.60	1.34	1.38
North Carolina	1.41	2.45	1.51
Alabama	.82	2.03	1.65
Arkansas	.44	1.28	.95
Mississippi	.41	1.42	.88

[1] Based on average of 1951 and 1952 per capita income from *Survey of Current Business*, August 1953.

Note: Amounts may not add to totals because of rounding.

of federal expenditures do not permit of direct combination of these estimates with state income. Despite the shortcomings of the estimates, an attempt was made to approximate an answer to the question raised on income redistribution, namely: Is there a net interstate income redistribution or does the income redistributive effect of federal expenditures offset the redistributive effects of federal revenues?

Private incomes after taxes and federal expenditures. An approach to the problem may be illustrated by the following simplified example. If it is assumed that there are but two states (and two people), one with a per capita income of $2,000 and another with a per capita income of $1,000, the range between them would be 2 to 1. Assuming federal taxes on a per capita income of $2,000 amount to $400 and on a per capita income of $1,000 to $100, the range of income after taxes would be reduced from 2 to 1 to 1.8 to 1. Assuming further that the total amount of tax collections—$500—is distributed uniformly between the two states as transfer payments (without any addi-

tion to total income) the per capita income of the two states after receipt of federal expenditures would be $1,850 and $1,150, respectively—a range of 1.6 to 1. Thus the redistribution of income effected by the tax differentials would be furthered by the distribution of expenditures. If the distribution of expenditures is such that $400 goes to the state with a $2,000 income before taxes and $100 to the state with $1,000 before taxes, the redistribution of income effected by the progressive tax structure would be exactly offset. If, however, the entire $500 was spent in the state with the lowest income, the maximum redistribution of income would be effected. The $2,000 income after federal operations would be reduced to $1,600 and the $1,000 income would be increased on balance to $1,400—a range of approximately 1.1 to 1.

Table III presents a similar type of analysis for the states based on the estimated revenue incidence and the illustrative distributions of federal expenditures. In the computation of the percentages presented in this table, Office of Business Economics estimates of income payments were adjusted for taxes not included in the estimates by adding to income payments the estimated incidence of revenue burdens assumed to be borne out of undistributed corporation earnings or to have reduced dividend income. The federal income component of state income was deducted from this adjusted income base. (In this computation, unemployment benefits have been counted as a state rather than federal payment.) Having derived an adjusted income figure after deduction of federal revenues and the federal component of income payments, the net adjusted private (non-federal) income figure for each of the states was computed as a per capita amount. The range of these adjusted income figures and their relation to the United States average are compared with the relative per capita amounts of federal expenditures under the two illustrative estimates.

In the poorer states, the estimated per capita amounts derived from federal expenditures generally are a higher per cent of the United States average than are their private incomes per capita after federal taxes. This relationship suggests that federal expenditures tend to raise the incomes of the poorer states. At the same time, for many, but not all, of the wealthier states, federal benefits and expenditure incidence per capita are a lower percentage of the United States average than are their adjusted per capita private incomes after federal taxes. On balance, therefore, federal expenditures appear to result in a redistribution of income additional to that effected by federal taxes.

This method of presentation assumes away part of the income redistributive problem—the effect of federal operations on income. What would be the regional distribution of income without federal governmental activities? It is not practicable to assume the absence of federal government activities; federal activities are an integral part of the economic life of the nation and historically have altered the geographic distribution of manpower, of industry location, and economic organization from which existing income patterns developed. These activities are varied and complex and include tariff, transportation, wage, trust, patent, and other policies which are not fully reflected in budgetary spending or revenue raising.

Distribution of income, expenditures and taxes. Another method of presen-

TABLE III

PER CAPITA ADJUSTED PRIVATE INCOME PAYMENTS, AFTER FEDERAL REVENUE INCIDENCE, AND PER CAPITA FEDERAL EXPENDITURES AS PER CENT OF NATIONAL AVERAGE: ILLUSTRATIVE ESTIMATES

Arrayed in Order of Per Capita Adjusted Private Income [1]	Adjusted Private Income Payments After Revenues Per Capita [2]	Per Capita Federal Expenditures as Per Cent United States Average	
		I—Benefit Illustration	II—Expenditure Incidence Illustration
Continental U. S.	100	100	100
Delaware	121	100	125
Connecticut	132	93	143
New York	126	99	100
Nevada	122	126	125
Illinois	123	95	90
New Jersey	125	93	111
California	119	103	131
Ohio	119	95	104
Massachusetts	107	100	99
Michigan	116	96	93
Rhode Island	99	101	89
Pennsylvania	108	99	92
Wisconsin	110	93	77
Oregon	106	119	94
Montana	109	118	92
Washington	104	111	157
Maryland	97	93	126
Indiana	110	93	108
Missouri	99	103	99
Wyoming	100	130	116
Kansas	103	100	128
Iowa	103	94	76
Colorado	92	108	98
Nebraska	99	98	88
Minnesota	96	98	109
New Hampshire	91	97	63
Maine	84	96	86
Vermont	85	98	64
Arizona	89	125	104
District of Columbia	39	171	221
Idaho	90	121	97
Texas	85	104	103
Florida	78	100	74
South Dakota	89	118	85
Utah	86	106	103
North Dakota	81	120	93
West Virginia	79	100	70
New Mexico	75	114	181
Oklahoma	73	110	96
Louisiana	71	109	95
Virginia	69	93	106
Georgia	68	98	77
North Carolina	69	91	56
Tennessee	68	104	111
Kentucky	66	101	90
South Carolina	64	95	99
Arkansas	60	106	78
Alabama	58	101	83
Mississippi	50	100	63

[1] The income payment series used is the average of income payments for 1951 and 1952 as reported in the *Survey of Current Business*, August 1953, with adjustments for residence. The income payments were increased by the estimated incidence of federal taxes assumed to be borne out of profits including the corporate income and profits taxes and stamp taxes (other than playing cards). From the increased total, federal income payments were subtracted to yield an adjusted non-federal income payment series.

[2] Federal receipts estimated to be borne in each state were deducted from the adjusted non-federal income payment series described in footnote 1. See table C-4 for the estimates of total incidence of federal receipts and table C-5 for receipt incidence per capita in *Statistical Materials on the Distribution of Federal Expenditures among the States.*

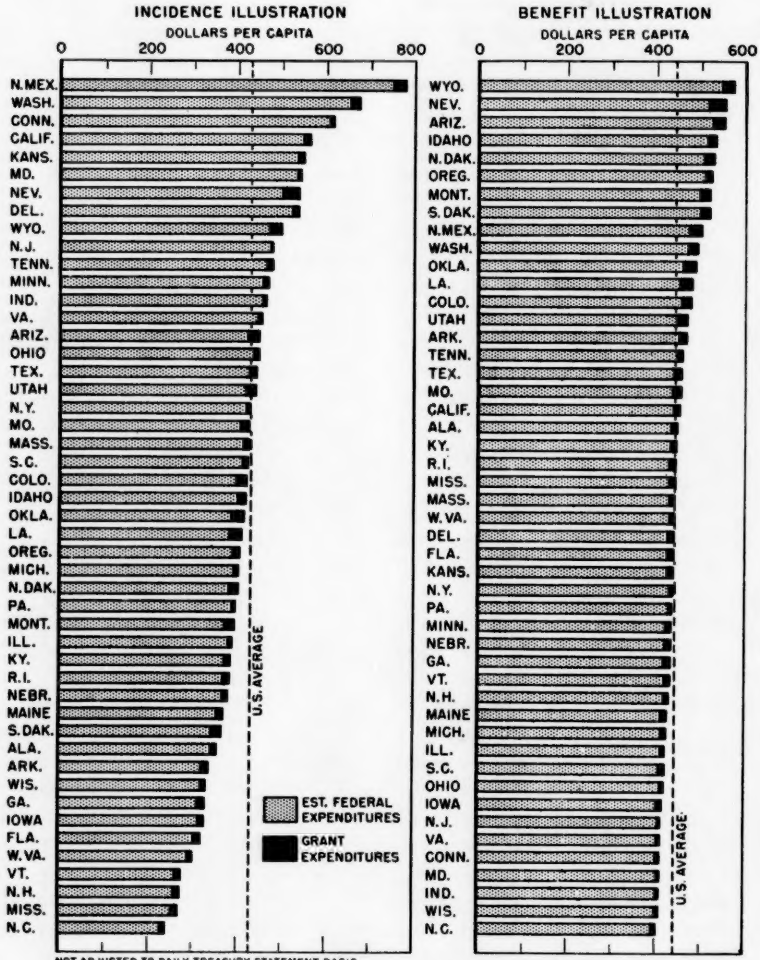
tation is illustrated in Figure 2. The cumulative per cent distribution of state income is shown plotted against the cumulative per cent of population in the states, with the states arrayed for this purpose by their relative per capita incomes. For example, approximately 15 per cent of the population of the nation is in the eight States with per capita incomes of $1,118 or less, states which account for about 10 per cent of the income of all the states. Almost half of the population of the nation

lives in states with per capita incomes of $1,668 or less and these states account for about 40 per cent of the income of the nation.

mated corporate tax payments as a partial adjustment for taxes assumed to fall on undistributed corporate earnings or to have reduced dividends to the

FIGURE 1

Per Capita Federal Expenditures and Grants, Fiscal Year 1952



NOT ADJUSTED TO DAILY TREASURY STATEMENT BASIS.

Before federal revenues were deducted from these state income figures, income was adjusted to include esti-

level reported in the state income series. Social security taxes were excluded from the revenues deducted since these

contributory levies are not included in state income figures.

As indicated by the cumulative curves, the federal tax levies result in some geographic redistribution of income. However the relative income position of the states is affected to only a minor extent by adjustment of state income for federal tax withdrawals. After deduction of federal revenues the variation in state per capita income at the extremes is narrowed from a high which is 2.8 times the low to a high, 2.4 times the low.

Each of the two concepts of federal expenditure distributions must be related to state income in terms of the specific framework of the expenditure estimate. The estimate of "benefits" includes at least two types of distributions—an allocation of cash income payments in the form of transfers from taxpayers to beneficiaries, as in the cases of veterans' disability pensions, and an allocation of imputed benefits from public services such as public health, education and national security, which involve federal purchases and wage and salary payments.

In measuring the change in distribution of income among the states resulting from federal benefits provided to residents, estimated benefits were added to the adjusted income figures less federal taxes. Since transfer payments are already included in state income estimates, the federal expenditures added are exclusive of these transfers. Federal aid to the states for public assistance was classified as a transfer payment for this purpose. A successive movement of the curves to the left gives an indication of the net redistribution resulting from federal budget financing.

The second expenditure estimate is designed to show not only the federal wage and salary bill in each state and the amount of transfer payments, but also that part of private income—payroll costs, property income and profits—which is financed by the federal dollar-flow. State income as measured by the Department of Commerce includes these income flows. While the publicly financed part of private activities is not segregated, the totals reflect the impact of federal spending. Accordingly, no further modification of this series other than tax withdrawals is indicated to show the redistribution of income among the states.

The several estimates show a redistribution of income in favor of the poorer states. This finding is supported by earlier studies of the Office of Business Economics which show the federal income component to be a larger proportion of the income of the poorer states than of other states.[31]

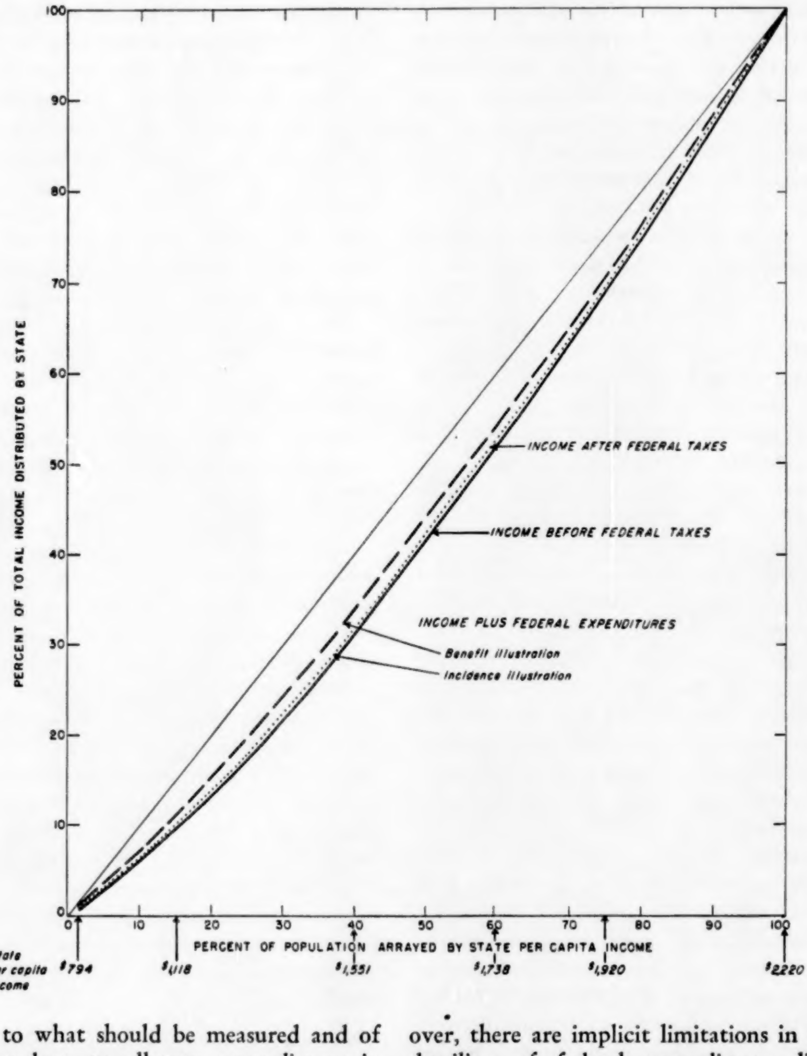
Correction of the income series for federal fiscal operations does not alter significantly earlier findings with respect to the relative capacity of the states. Within the context of the state income series, federal expenditures are accounted for adequately as dollar-flows. While the federal government component of the series excludes income received as a consequence of federal purchases, these amounts are reflected in the private industrial sectors—private wage and salary payments, dividends, net rents and interest. In combination, the private and public payments show the income-flows from federal operations.

[31] Schwartz, Charles F., and Graham, Robert E., Jr., "State Income Payments in 1946," *Survey of Current Business*, August 1947, pp. 9-24.

Some cautions. The estimates presented above are rough and approximate. There will be differences in views as to what should be measured and of how best to allocate expenditures in terms of a given concept of measurement. These conceptual problems are compounded by the gaps in statistical information and the often crude indexes that are used as a substitute. Moreover, there are implicit limitations in a detailing of federal expenditures directed to the achievement of national purposes and program objectives as a

FIGURE 2

CHANGES IN DISTRIBUTION OF INCOME BY STATE



series of state-by-state figures. Ease of movement of people across state lines, the dependence of industries in one state on raw materials, machinery and semi-finished goods in others, the frequency of absentee ownership of property in the state—all contribute to an emphasis on national objectives and purposes. Federal taxing and spending are governed by these national objectives and requirements. Geographic variations occurring in the taxing or spending process are a byproduct of the pursuit of these national objectives. An overlay of state boundaries on these national programs necessarily yields a distorted view of federal fiscal operations.

Furthermore, sectional interests as well as national interests are essentially parts of an overall common concern with national markets, national prosperity, and economic growth. The long-run economic interests of various sections of the nation patently coincide in the criss-crossing interstate flows of goods, funds, people and property ownership.[32]

[32] Harris, Seymour E., "Taxes and Treasury Disbursements: Regional and State Differences, 1934-1954, 1939, 1952, 1953, 1954." In *New England Textiles and the New England Economy*; Report to the Conference of New England Governors, February 1956, pp. 110-164; Press release on statement by Senator Herbert H. Lehman to the U. S. Senate, January 9, 1956; Anderson, William, and Durfee, Waite D., Jr., "The National-State Fiscal Balance." In *Intergovernmental Fiscal Relations*, Minneapolis, University of Minnesota Press, 1956, pp. 85-95.

CONCEALED SUBSIDIES IN THE FEDERAL BUDGET

ROBERT L. HUBBELL [1]

IN its report on lending agencies [2] the second Hoover Commission called attention to certain practices which it characterized as hidden subsidies. Its recommendations for abolishing these subsidies, or for bringing them out into the open, have aroused considerable controversy, particularly in the case of the Rural Electrification Administration.[3]

The Commission singled out for attention a few instances in which the government fails to collect interest or fees equal to market values. Subsidies of this type are dwarfed by instances in which the government provides a concealed subsidy by purchasing goods for more than the market price or by allowing special tax concessions. This paper analyzes the instances cited by the Commission in the context of the more general " subsidy problem." The review of the scope of concealed subsidies is preceded by a discussion of basic definitions and a description of the general principles which the author believes should be followed in relation to subsidies.

Definitions

The word subsidy derives from a Latin word meaning the troops stationed in reserve in the third line of battle. From this idea of support, the term came to be applied to almost any kind of financial aid. More specifically, Webster's New International Dictionary defines a subsidy as "a grant of funds or property from a government . . . to a private person or company to assist in the establishment or support of an enterprise deemed advantageous to the public. . . . A subsidy may be a simple gift or may . . . [be] the payment of an amount in excess of the usual charges for any service, as in carrying the mails . . . ." [4]

This definition has certain difficulties. First, it confines the term subsidy to " enterprises " or commercial activities. By so doing, it excludes benefits paid to individuals such as veterans or

[1] The author is a fiscal economist with the U. S. Bureau of the Budget. The author greatly appreciates suggestions of various colleagues in the Bureau and the assistance of the Bureau library. However, this article and the views and conclusions expressed are the author's and do not necessarily reflect the position of the Bureau of the Budget.

[2] *Lending Agencies*, Report of the Commission on Organization of the Executive Branch of the Government, March 1955.

[3] For example, see pp. 2561, A1837, A1859, and A1947 of the *Congressional Record*, 84th Congress, First Session, for editorials, letters, and speeches.

[4] Second Edition, Unabridged, G. & C. Merriam Company, 1946, page 2514, meaning 3b.

students but includes benefits paid to individuals as farmers. Such a narrowing of the field has advantages, except that some benefits which are not to support enterprises are often considered subsidies. For example, the government makes " annual contributions " to local public housing authorities to cover the cost of servicing the latter's housing debt, thus making it possible for lower rents to be charged the low-income occupants of public housing. The low rents are said to be subsidized. Apparently the word " enterprise " needs to be supplemented by the word " consumer." On the other hand, similar transactions in supporting hospitals or schools with tax money when the fees are not adequate to cover expenses are often not considered subsidies because operating schools and aiding hospitals is generally considered a proper governmental (including state-local) function rather than assistance to a commercial enterprise.

Another difficulty with the dictionary definition is its emphasis on direct grants, gifts, and payments. The same effects may be realized indirectly by provision of services at less than cost. Furthermore, subsidies need not be confined to the expenditure side of the budget. Special tax concessions which reduce expenses for particular kinds of enterprises may have results similar to direct payments. Some special tax concessions, such as those enjoyed by shipping and mining companies, were designed to serve as subsidies. Other tax concessions may have the same result although this was not the intent. For example, tax exemptions for churches stem from the effort to separate church and state.[5]

[5] McLaughlin, Andrew C., and Hart, A. B., *Cyclopedia of American Government*, New York: Peter Smith 1930, Vol. 1, p. 268.

It becomes apparent that a definition of subsidy is a problem of political philosophy which elicits different answers for different times, places, and individuals. Since subsidies are held in disrepute by many people (getting something for nothing and interference with the " law " of supply and demand are considered questionable at best and perhaps even immoral), the word " subsidy " is seldom used for a policy which the speaker or writer favors.

Disagreement or differences of opinion about applying any definition make a consistent policy (and even a consistent analysis) difficult. Some devices which this paper describes as subsidies may not be so considered by the reader, and usually are not so considered by the recipient of the benefit.

For purposes of this paper, the economic characteristics are stressed. A subsidy is defined as a government financial device which enables sellers to net more money or buyers to get more goods and services than would be the case if the affected commercial transactions had occurred without government intervention. The financial device may involve (1) direct or indirect payments in cash or kind, (2) provision of goods or services for prices or fees which do not reflect full competitive market value, or (3) lower taxes which are exceptions to general tax rates. Thus a subsidy is a financial (rather than a regulatory) modification of the results expected from the operation of normal market forces.[6] This operational ap-

[6] The author is indebted to Carl Kaysen's article " On Defining a Subsidy " pp. 3-11 of *Public Policy*, A Yearbook of the Graduate School of Public Administration, Harvard University, 1953, for insights into the problem of definition and effects. The volume also contains articles on subsidies for airlines, farmers, and inland waterways.

proach is not entirely satisfactory because it assumes agreement on when transactions are commercial and it dodges the political problems of determining the circumstances under which people are acting as buyers and sellers rather than as citizens or clients. Nevertheless, it may serve to limit the analysis to useful and meaningful bounds.

If an " open subsidy " were described as a payment by direct appropriation which carried the word " subsidy " in its title, the only example in the federal budget is the " operating-differential subsidies " for the maritime industry. (The appropriation " ship construction, maritime activities " uses the term " construction-differential subsidy " in the appropriation language but not in the title.) If, on the other hand, an " open subsidy " were considered to be any device which meets the economic definition given above and which is provided by a direct appropriation with no other purpose, a few other examples can be found. These are " payments to air carriers," " Sugar Act Program," " International Wheat Agreement," and "National Wool Act." Of these four, the word " subsidy " is used in the program and performance statements published in the federal budget document only for the first, payments to air carriers. Other terms are " incentive payments," " export payments," " diversion payments," " differential payments " and " price supports." (The exact amount of subsidy in price support payments is concealed because the final cost to the government depends on the realized losses when surplus stocks are sold or donated.)

For this paper, the use of words other than " subsidy " is not considered concealment, but the test of concealment is whether or not the subsidy is provided by a direct single-purpose appropriation.

General Principles

Economically, subsidies change the allocation of resources which would result from the operation of the market and price mechanism. They raise the living standards, investment return, or competitive advantage of some at the expense of others. Fiscally, subsidies burden the general taxpayer. Their tendency to become permanent adds rigidity to budgets so that adjustments to emergencies or new needs are more difficult. For these reasons, they are regarded as exceptions to the normal conduct of government and of commercial activities.

However, numerous instances arise in which the nation through its elected representatives decides that the general public interest requires a modification of the results which could be expected from normal market forces. Thus we enact a minimum wage or a tariff or a direct subsidy (open or concealed). The reasons for particular subsidies and opinions as to their merits vary. Among the reasons are strengthening national defense, making the nation more self-sufficient, protecting labor standards, speeding the settlement of open land, rewarding veterans, combatting unemployment in depressed areas, equalizing incomes, preserving small business, and improving living conditions.

In some instances, economic as well as social or defense arguments can be adduced in favor of subsidies. Thus aid to small business may be said to prevent monopoly and help keep the competitive price system which subsidies appear to modify. Aid to a new form of transportation may increase productivity of

other industries. Low-rent housing in place of slums may reduce costs of disease, crime control, and fire hazards. Aid to depressed areas may preserve existing investment in houses, schools, and public utilities, which would have to be duplicated if workers and their families migrated to other areas. Rural electrification may release farm labor for other activities.

The number of existing subsidies and the persuasiveness of the arguments for them should not change the approach to them as exceptions to the normal conduct of government activity or commercial business. Approval of new subsidies should be contingent on strong justification. Their cost should be related to the needs of the nation and to the benefits obtained. When the circumstances which justify subsidies change, the subsidies should be discontinued or reduced. Applying these principles is difficult because of political pressures and because recipients acquire a vested interest. Frequently, failure to grant one group a subsidy is attacked as discrimination if similar groups already enjoy a subsidy; also efforts to reduce or eliminate subsidies are sometimes attacked as a breach of faith.

The application of these principles of justification and limits on size and duration is made more difficult by concealment of subsidies. The need for original justification may be circumvented. Continuing review and examination may be frustrated because the amounts are not evident or because the issue does not arise periodically as with an appropriation. Where possible, therefore, direct appropriations should be used to permit adequate executive and legislative review and control.

Scope of the Problem

Three types of concealed subsidies are discussed in this section:

1. Failure of government to collect interest or fees equal to market values.
2. Purchases by government for more than market price.
3. Special tax provisions.

1. *Failure of government to collect interest or fees equal to market values.* Special services or privileges for which existing charges are often less than market values or do not cover costs, or for which there are no charges, may be furnished in connection with many disparate types of federal government activities:

- Licensing.
- Inspection, testing, and grading.
- Airways and rivers and harbors.
- Postal service.
- Lending, insurance, and workmen's compensation.
- Permitting use of government land.
- Irrigation, flood prevention, and power development.
- Recreation and tourist facilities.
- Publications.
- Maps, charts, and aerial photographs.
- Other services such as special studies, copying and searching records, stocking fishponds, provision of atomic products, bullion transactions, etc.

For many of these activities, opinions may differ on whether a subsidy for a special group is involved or whether the government is simply performing a general function which should be supported by general taxation. Even if the propiety of user charges is admitted, opinions may also differ on whether a subsidy exists when the government provides a service at less than market value (but

recovers costs)—or if an activity is subsidized only when it is provided at less than cost. Where government is able to charge less than the market price and still cover costs, two policy questions arise. First, should the government perform that particular function at all or should it encourage further private competition instead? If the decision is that the function should be performed by government, then the second policy question is whether the general body of taxpayers should realize a profit or the users of the service should enjoy cut prices. Finally, for services (such as mapping) which are partly for the general public and partly for direct government use, should the government recover the average cost or the marginal cost?

In the past few years, numerous studies have been made concerning government charges for various services to special groups and some action has been taken. Impetus to action was furnished by Title V of the Independent Offices Appropriation Act of 1952 expressing the sense of the Congress that fees should be set to make certain activities self-sustaining. A number of agencies raised fees to more nearly cover costs, where such action was possible without further legislation. In addition, government-wide action was taken through the issuance of Bureau of the Budget circulars on rentals for government quarters, copying and certifying, and licensing.[7] Rents were raised, as were various fees for copying. Most agency proposals on licensing were deferred pursuant to a resolution of the Senate Interstate Commerce Committee.[8] Legislation has been introduced to raise patent fees and postal rates and thus reduce the deficits of these two operations.[9] In his message on the 1958 budget, the President called attention to the fact that estimated budget expenditures for all federal aids to aviation will total $464 million. He pointed out that these aids confer substantial special benefits upon the users of the airspace and stated that as the cost of providing these benefits rises, it becomes increasingly appropriate for the users to share with the general taxpayers in paying for them.[10]

Rather than review the facts and problems involved in all instances in which the government provides special services at less than market value, attention will be concentrated on the three kinds of hidden subsidies enjoyed by clients of government lending and insurance agencies which were cited in the Hoover Commission Report.

The first of these concerned the income received by public enterprises on funds invested in United States securities. Conceivably, these funds could have been applied to retiring the government's capital stock subscription. Recommendation 45 called for the surrender to the Treasury by government enterprises of all United States securities held, up to the amount of capital furnished by the Government. This recommendation summarized four specific recommendations (Numbers 1, 23, 25, and 27) concerning the Federal Savings and Loan Insurance Corporation, banks for cooperatives, intermediate credit banks, and production credit cor-

[7] Circulars A-45, A-28, and A-25 respectively.

[8] P. 4936, *Congressional Record,* 83d Cong., 2nd Sess.

[9] H. R. 4983, 84th Cong., 1st Sess., "A bill to fix the fees payable to the Patent Office" and S. 1534, 85th Cong., 1st Sess., "A bill to readjust postal rates."

[10] Page M40, *The Budget of the United States Government for the fiscal year ending June 30, 1958.*

porations. Two other small instances which Recommendation 45 would also seem to cover are the veterans' special term insurance fund and the farm tenant-mortgage insurance fund.

The Commission recommended the retiring of capital stock for several reasons. The one which is pertinent to this paper was that " the Government is paying interest on its own investment and, in some cases, it amounts to a hidden subsidy." [11]

If there is a subsidy, it must be to the borrowers or policyholders of a government enterprise, not to the enterprise itself. (The government cannot susidize itself.) A subsidy occurs when the income of an enterprise from fees, interest paid by borrowers, sales, etc., does not cover its outgo for administration, losses, etc. The fact that the enterprise is credited with receipts in the form of interest on federal securities does not in itself indicate the extent or existence of a subsidy. The interest receipts from the Treasury on securities may be partly offset by interest payments on money borrowed from the Treasury or by dividends paid to the Treasury on capital stock of the enterprise. Or the enterprise may be charging its customers sufficiently high rates so that all costs are covered without the additional income from interest.

The situation for the six enterprises with investments in United States securities is shown in the following table. The data are given for the fiscal year 1955, the most recent year for which reports were complete at the time this article was being prepared. The holdings of securities are compared with the amount of stock and the income from securities is compared with the total net income.

The six enterprises had capital stock held by the Treasury of $300 million on June 30, 1955. The maximum amount which the Commission recommended retiring for each enterprise was the capital stock or the enterprise's investments in United States securities, whichever was less. In total, this amounted to $190 million. The average rate of interest paid by the government was 2.27 per cent or $4.3 million on the securities which might have been turned in. The amount received by the government as franchise tax or dividends was $2.9 million, leaving a Treasury " contribution " to the enterprise of $1.4 million.[12]

As the table shows, only one of these enterprises, the production credit corporations, was operating at a loss. In accordance with the Farm Credit Act of 1956, the production credit corporations were merged into the intermediate credit banks as of January 1, 1957, and the government has received new stock in the banks in exchange for its stock in the corporations.

One of the enterprises, the veterans' special term insurance fund, has retired its capital stock in the fiscal year 1956. However, the policyholders of this and other veterans' insurance benefit from a different kind of subsidy in that the administrative expenses for the insurance are paid from appropriated funds rather than premiums.

Provision has recently been made by statute for gradual retirement of capital stock of two other enterprises, the Federal Savings and Loan Insurance Corpo-

[11] Report on Lending Agencies, *op. cit.*, p. 106.

[12] 1955 Report of the Secretary of the Treasury, p. 518.

ration and the banks for cooperatives.[13] This leaves only the farm tenant-mortgage insurance fund with capital stock of $1 million on which no action has been taken since the Hoover Commission report.

The second kind of hidden subsidy which the Hoover Commission singled out was the failure of some lending or insurance agencies to pay the Treasury a rate of interest on advances from the Treasury equal to the going rate which Treasury paid for its own obligations of comparable maturity. Failure to pay the going rates could understate the costs and hence lead to lower charges to clients.

The report cited the Farmers' Home Administration, Rural Electrification Administration, and Commodity Credit Corporation. While several other agencies paid what seem to be low rates today, they were apparently the going rates at the time the agencies borrowed. In 1953, the Treasury raised the interest rates it charged on borrowing by most government agencies. Recent issues for the Export-Import Bank, Federal National Mortgage Association, and Defense Minerals Exploration Administration have been at the going rate.[14] Legislation has recently been introduced which would require agencies to pay the current average market yields of outstanding marketable obligations of the United States having maturities comparable to the loans made by the agency.[15]

Recommendation 43 would also appear to cover payments of dividends or interest on capital stock subscribed by the Treasury. No such payments were made by FNMA or the Public Housing Administration on capital stock or by the Farmers' Home Administration, REA, and the Federal Housing Ad-

TABLE I

U. S. SECURITIES HELD BY GOVERNMENT ENTERPRISES

(In thousands)

Enterprise	As of June 30, 1955		Fiscal 1955	
	Par Value of Securities Held	Capital Stock and Paid-in Surplus Held By Treasury	Income From Interest on U. S. Securities	Total Net Income or Loss (-) of Enterprise
Federal Savings and Loan Insurance Corporation	$241,690	$ 54,847	$5,320	$23,863
Banks for cooperatives	42,463	150,000	1,058	7,924
Intermediate credit banks	59,524	62,400	1,450	3,344
Production credit corporations	41,924	31,475	1,051	-569
Veterans' special term insurance fund	9,589	250	114	6,491
Farm tenant-mortgage insurance fund	1,250	1,000	40	652
Total	$396,440	$299,972	$9,033	$46,705

Sources: Report on Lending Agencies, 1956 and 1957 Budgets, 1955 Report of the Secretary of the Treasury.

[13] P. L. 576, 81st Cong., for FSLIC and Farm Credit Act of 1955 for banks for cooperatives.

[14] Pages 546-8 of the 1955 Annual Report of the Secretary of the Treasury list all notes and bonds issued by agencies to the Treasury.

[15] S. 2427, 85th Cong.

ministration on expended appropriations which serve in lieu of stock or loans to the agencies. The banks for cooperatives and intermediate credit banks paid franchise taxes which were less than the prevailing rate of interest. The dividends or interest paid by the Commodity Credit Corporation and the Export-Import Bank were also less than the going rate. The Export-Import Bank pays no dividends on its reserve of retained earnings. However, the Bank's earnings are high enough that it would not have to raise its rates to borrowers even if it increased its costs. For some of the other agencies, payment of dividends might require higher charges to the public or larger appropriations.

The third type of hidden subsidy could occur when agencies receive money from general tax funds rather than from their clients for administrative expenses.

Recommendation 44 called for lending agencies to charge fees which would enable them to cover administrative expenses. Seven examples were cited of enterprises whose administrative expenses were paid by appropriations.

In one of these examples, the Small Business Administration, funds for administrative expenses for the lending activities are paid from the salaries and expenses appropriation but are transferred from the revolving fund for loans rather than from general funds of the Treasury. In another example, loans of the Bureau of Indian Affairs, administrative expenses have been paid from the revolving fund starting in fiscal 1956, subsequent to the Commission's report. Part of the expenses for crop insurance have also been paid from the revolving fund since the fiscal year 1955. The subsidy on Farmers' Home Administration loans would be less than the $26 million cited by the Commission if its expenses could have been split between technical assistance and loan administration, as was done for the Small Business Administration.

The largest subsidy of administrative expenses, for veterans' insurance programs, has been declining from $41.5 million in the fiscal year 1953 to an estimated $25 million in 1957 as a result of improved operations and a slight

	Fiscal Year 1954 (In Millions)
Veterans' life insurance program ..	$37
Veterans' housing operations	14
Farmers' Home Administration ..	26
Federal Crop Insurance Corporation	7
Rural Electrification Administration	7
Bureau of Indian Affairs loans	*
Small Business Administration (loan functions)	4
Total charge on general taxpayer	$95

* Less than $500,000.

decrease in the number of policies outstanding. Issuance of additional insurance was ended in 1951 as a result of legislation which substituted indemnities for insurance at an overall saving. Legislation passed in 1956 provided substitute benefits in the form of new dependency compensation benefits and of coverage under the old-age and survivors insurance system.[16] It is unlikely that any legislation will be passed to charge administrative costs for the insurance which is still in force to the insurance trust funds. Such a charge

16 Servicemen's and Veterans Survivors Benefits Act (70 Stat. 837).

would mean a genuine saving for the general taxpayers and would reduce the amount of dividends paid policyholders. However, it might be regarded by some as a breach of contract with the policyholders.

The demand for loan guaranties on veterans' housing has dropped considerably since lenders are not interested in mortgages at 4½ per cent. Furthermore, the World War II program is scheduled to expire on July 25, 1958.

The proposed legislation on interest rates which was previously cited would require that agencies charge not less than the Treasury rate, "plus an additional amount deemed adequate to cover administrative expenses and probable losses *to the extent consistent with the purposes of the loan program.*" [17] The italics have been added to emphasize the grounds for a possible continuing subsidy for administrative expenses or losses, but no exception is allowed for the cost of money to the Treasury. If enacted, this legislation would require higher interest rates for loans of the Rural Electrification Administration and disaster loans of the Small Business Administration, as well as some loans of the International Cooperation Administration.

Even those lending and insurance agencies which set out to cover their administrative expenses from their earned income receive some help from the general fund on certain overhead expenses, although there has been progress in showing all costs. For example, the employer's contribution to the civil service retirement fund has been paid by some corporations and will be charged back to all agencies beginning in the fiscal year 1958. Cost of public health service for employees has been charged to the agencies for several years. The administration has made a similar proposal for compensation for injured employees. The FBI and Civil Service Commission now charge agencies for the cost of field investigations of employees. Legislation has been introduced to require all government corporations to pay for central services, such as recruiting personnel and providing buildings.[18] However, similar expenses for noncorporate agencies would still not show as part of their costs.

To summarize, the Hoover Commission Report on Lending Agencies had recommendations on three practices which might involve subsidies. Only one of these, the failure to charge fees which cover administrative expenses, always involves a subsidy. In the other two instances, receipt of income by public enterprises from investments in United States securities and failure to pay the going rate of interest on borrowing from the Treasury, subsidies are likely to occur. Since the Hoover Commission report, some action has been taken to eliminate or reduce some subsidies, and legislation has been proposed to reduce others. But exceptions would still be allowed if the purposes of the loan program seemed to require subsidies.

2. *Purchases by government for more than market price.* Many of the subsidies previously mentioned are not completely concealed since the amounts involved (such as the difference between income from patent fees and Patent Office expenses or the appropriated administrative expenses of REA) can be

[17] S. 2427, 85th Cong.

[18] H. R. 8332, 85th Cong.

ascertained by those who are thoroughly familiar with the United States Budget document. A more completely concealed subsidy occurs when the government pays more than the market price for goods or services, and finances such a subsidy out of an appropriation which presumably is entirely for the payment of goods and/or services.

One example is the requirement that 50 per cent of all exports financed by appropriations be carried on American ships. This adds to the apparent cost of our foreign aid and agricultural disposal programs, and the public does not realize that the maritime industry gets a subsidy, i.e., the difference between freight rates on American and foreign ships, in addition to its other subsidies—operating and construction subsidies, tax privileges, and personnel training in government schools.[19]

A similar subsidy is granted to various manufacturers as a result of the Buy American Act. How much this increases government costs can never be known, because the requirement that foreign bids must be at least 6 per cent under American bids before they will even be considered undoubtedly discourages many foreign bids and rules out other foreign bids which may be less than the accepted American bid. The public becomes conscious of the subsidy element only when a qualified foreign bid on a large item is publicly rejected in favor of a higher American bid. The Buy American Act was attacked by the Randall Commission, not on the grounds that it was a subsidy, but because it interfered with foreign trade.[20] The President then modified the previous 25 per cent differential to 6 per cent with certain exceptions.[21] Further action would probably require legislation.

Contracts for strategic and critical materials in the stockpile have sometimes been above the market price to encourage more production. In some cases, these contracts have resulted in a two-price system which avoided a general price rise. In other cases, they have probably raised the general price level (the additional demand generated by the stockpile has generally stabilized prices for some materials, although this was not ordinarily the intent). The stockpiling program, therefore, sometimes tends to go in the direction of a price support and subsidy operation for certain domestic materials. The purchase decisions can and sometimes do seem to relieve depressed or threatening conditions in the industry. The subsidy that thereby occurs is thus concealed under such terms as " long-term objectives " and "maintenance of essential elements of the mobilization base." Much of this subsidy is financed under the Domestic Purchase Regulation Programs under the Defense Production Act, which absorb the difference between purchase and market price and sell to the stockpile at market price. Out of gross transactions of $308 million, a subsidy of $164 million would be paid for asbestos, beryl, columbium, manganese, mercury, mica, and tungs-

[19] For a more complete discussion, see "Direct and Indirect Types of Maritime Subsidies With Special Reference to Cargo Preference Aid," U. S. Department of Commerce, April 1956. This report concludes that: "The significant Government aids now available to vessels of United States-flag registry are direct types of aid. They are plain as to purpose, definite as to amount, and have no secretive or disguised meaning."

[20] *Report of the Commission on Foreign Economic Policy,* January 1954, p. 45.

[21] Executive Order 10582, Dec. 21, 1954.

ten over a period of five to eight years.[22]

Atomic Energy Commission contracts for uranium have also been set high enough to encourage production. The guaranteed price will go to 1966, and the projection so far into the future might be questioned. The AEC will also face problems soon on the prices it will pay for the plutonium which will be a byproduct of power reactors.

The price support operations of the Commodity Credit Corporation are now generally recognized to involve subsidies, although part of the original argument for such operations was that they averaged out prices over the years with little or no subsidy. The amount of the subsidy is usually said to be the CCC realized losses, although the government accounts showing the losses do not relate to the year in which the payments were made. In addition, certain specialized operations of the CCC are paid by later appropriations which are not considered reimbursements for losses. Also, part of the subsidy involved in maintaining prices is passed on to the foreign aid appropriations, which often buy from CCC at the supported price rather than the market price.

Military procurement also involves certain concealed subsidies as contracts are spread among several firms to maintain a mobilization base (since 1953 this has been done to a lesser extent than in some earlier periods). Similarly, certain proportions of procurement may be set aside for small businesses although their bids are not the lowest. Special preference is also given to depressed areas.

3. *Special tax provisions.* Instead of paying out subsidies, the government often extends aid to enterprises in the form of special tax concessions. These reduce the costs and increase the profits of firms at the expense of other taxpayers who must thereby pay more to meet the cost of government. (Since this paper deals largely with subsidies to commercial enterprises, preferential tax treatment which is given to individuals, state and local governments, and certain private institutions will not be discussed.)

An example of a special tax privilege which supplements subsidies is contained in the Merchant Marine Act of 1936. Stated generally (there are various exceptions and technicalities), shipping companies which receive an operating subsidy can deposit their earnings in a construction fund reserve and not pay the corporation income tax on the amounts so deposited. Thus the government, in effect, helps to finance the company portion of new construction in addition to paying an open construction subsidy. The importance of this tax concession has grown as corporate tax rates have gone up from 15 per cent in 1936 to 52 per cent at present.

Percentage depletion allowances supplement other aids given for minerals exploration and production. The history of depletion allowances illustrates how temporary tax subsidies become permanent, spread to other industries, and become more costly than first intended. In World War I, tax-free deductions of the value of property at the time of discovery or within 30 days thereafter were allowed. To overcome administrative difficulties in determining

[22] Testimony of Max Medley of General Services Administration, February 2, 1956, p. 875, Hearings before the Independent Offices Subcommittee of the House Committee on Appropriations, 84th Cong., 2d Session.

property value at time of discovery, percentage depletion was allowed for oil and gas wells in 1926. The figure of 27½ per cent gave dollar deductions which were about the same as under the discovery value rule until the corporate tax rate rose above the 1926 level of 13.5 per cent. Furthermore, the percentage depletion continues as long as income is produced and has no limit such as discovery value. Percentage depletion was extended to metal mines, sulfur and coal in 1932, and to 13 nonmetallic minerals in 1942 and 1943. These emergency (wartime and depression) incentives were not rescinded or allowed to expire. The other extractive industries regarded the allowance as unfair discrimination, and in 1947, 1951, and 1954 coverage was extended, percentages raised, and the processes covered were broadened. Even mine residues became eligible. A " pass-through " of the deductions to stockholders of extractive industries has now been requested. Oil and mining interests now get double deductions for many exploration and development costs, first by counting these costs as an expense rather than capital and then by depletion allowances.[23]

TABLE II

ESTIMATED EROSION IN BUSINESS INCOME TAX BASE
(Calendar year 1955. In millions)

Income Excluded From Tax Base	Corporate	Noncorporate
I. Wholly tax-exempt interest	$ 400	....
II. Expense deductions:		
Depreciation	3,120	$200
Depletion	2,300	500
Exploration and discovery	1,100	200
Other capital expenditures	n.a.	40
Officers compensation	n.a.	n.a.
Contributions	500	n.a.
III. Special treatment:		
Life insurance companies	400	....
Mutual savings banks and savings and loan associations	200	....
Cooperatives	50	50
Maritime industry	20	....
Total	$8,090	$990

Amounts in Tax Base With Low Rates	Amount	Revenue Loss
I. Partially tax-exempt interest	$ 90	$ 20
II. Special treatment:		
Capital gains	2,000	[a] 450
Western Hemisphere trade corporations	....	140
III. Unreasonable accumulation of surplus	....	10
Total revenue loss	....	$620

[a] Excludes estimated $20 million loss for capital gains on livestock and unharvested crops.
"n.a." denotes not available.

[23] Hellmuth, Wm. F., Jr.—Erosion of the Federal Corporation Income Tax Base in *Federal Tax Policy for Economic Growth and Stability*, Papers submitted by panelists to Subcommittee on Tax Policy of the Joint Committee on the Economic Report, November 9, 1955, pp. 899-900.

Accelerated tax amortization which is granted to selected firms in " defense related " industries gives these firms a temporary advantage. If the tax rates are later reduced, so that the firms do not eventually pay at the same rate on higher taxable profits realized when no amortization is included in expenses, the temporary advantage becomes permanent. In any event, even if the tax rate remains stable, the firms have had, in effect, an interest-free loan.

The problem of exceptions and allowances on corporation income taxes was analyzed in hearings of the Joint Economic Committee in the fall of 1955. Estimates of the total " erosion " of the business income tax base for the calendar year 1955 are shown in the following table.[24] If income excluded from the tax base had been taxed, the yield would have been $3.8 billion. Another $.6 billion in taxes was lost from the income now in the tax base but taxed at lower rates. In addition, about $1 billion would have been added to the individual income tax base if changes in tax laws on interest, expenses, capital gains, etc., were applied to individuals as well as corporations. If the special concessions for corporations were eliminated, the same total revenue from corporation income taxes could be obtained after cutting all rates nine percentage points.

Differential tax rates, either for excises or income taxes, can have the effect of giving industries a competitive advantage. Some of these differences are accidental, as when an excise applies to phonographs but not to the newer types of record players and wire recorders. At other times, the tax is reduced or removed purposely to help a depressed industry. This argument was cited by the Senate Finance Committee when the tax on motorcycles was repealed in 1955.[25] The Ways and Means Committee has been reviewing the whole area of excise tax rates and numerous changes may be considered by the present Congress.[26]

Tariffs are another category of special taxes which have a subsidy effect. They differ from other concealed subsidies in that they do not result in government expenditures (except as the government pays more for its own purchases) or in loss of government receipts. Instead the subsidy is paid by consumers to keep alive marginal industries which would otherwise have losses, or to increase the profit margins of firms which are already able to compete with imports. By reducing imports, tariffs reduce the number of dollars other countries have for purchasing American agricultural or industrial products. (This shifting of American productive resources from activities catering to export markets to those selling at home has been largely offset by foreign aid.) By raising prices. tariffs reduce the total amount of goods which American families can purchase. That tariffs are regarded as aids is shown by the arguments of their proponents. The sad circumstances of industries affected by imports are usually cited.

[24] Hellmuth, Wm. F., Jr.—Erosion of the Federal Corporation Income Tax Base in *Federal Tax Policy for Economic Growth and Stability*, Papers submitted by panelists to Subcommittee on Tax Policy of the Joint Committee on the Economic Report, November 9, 1955, p. 914.

[25] P. 5536, *Congressional Record*, 84th Cong., 1st Sess.

[26] Reports to the House Committee on Ways and Means from the Subcommittee on Excise Taxes, April 20, 1956, and December 31, 1956.

The effects of recent tariff legislation are hard to assess. On the one hand, authority to make reciprocal trade agreements was extended, and some reductions have been negotiated. On the other hand, industries were given two new grounds on which to make appeals for higher tariffs—a more restricted definition of industry which makes it easier to show injury and a national defense clause which makes the Office of Defense Mobilization as well as the Tariff Commission a channel for appeals.[27]

Conclusion

Many different kinds of issues—administrative, political, and economic—are involved in the tremendous range of concealed subsidies for which examples have been described. Consequently, actions to reveal or remove subsidies have to be tailored to the program. Special attention should be given to tax concessions which are the most effective way of concealing a subsidy since there is no report at all in the budget or appropriations hearings of money which is not received. Moreover, special tax provisions probably equal or exceed in revenue loss the cost of all other concealed subsidies combined. The opportune time to attempt reforms in tax concessions, which would raise taxes for some, would be when tax reductions were being enacted for all.

[27] Trade Agreements Extension Act of 1955.

STATE SALES TAX ADMINISTRATION COSTS

JAMES H. MALOON* AND CLINTON V. OSTER**

General Importance

IN a period of two and one-half decades, sales taxes have become the most productive state-collected tax. Thirty-three states now levy such taxes which had a combined yield of more than $3.0 billion in 1956 and accounted for about one-third of total tax collections in these states.[1]

Since tax statutes ordinarily are not self-enforcing, it becomes necessary to develop and finance appropriate administration and collection machinery in order to realize the potential yields of a tax, to ensure equitable treatment within the law among those subject to the tax, and to maintain taxpayer morale. Outlays for tax administration have no economic value in themselves and can be justified only as a means for attaining the fiscal or nonfiscal objectives of a tax. In recent years the costs of various sales tax administrative techniques and procedures have been the subject of considerable study as state agencies have sought to improve their existing practices.[2] The results of a recent study and survey of state sales tax administration costs made by the Ohio Department of Taxation, Division of Research are summarized in this article.

Nature of Sales Tax Collection Costs

Two broad kinds of costs are incurred in the administration and collection of a sales tax or any other tax. First, there are various governmental administration costs necessary for processing tax returns and payments and for discovering and combating non-compliance. Secondly, retailers and other taxpayers incur certain costs in complying with the various requirements of the tax statute.

Governmental sales tax administra-

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[1] In these states sales taxes accounted for 32.7 per cent of total tax collections. U. S. Bureau of the Census, *Compendium of State Government Finances in 1956* (State Finances: 1956, No. 2), Washington, 1957, pp. 11-12.

[2] See: Oster, Clinton V., *State Retail Sales Taxation*, (Columbus: The Ohio State University Bureau of Business Research, 1957), pp. 157-181; *Ohio Sales Tax Central Accounting System* (Ohio Department of Taxation, Division of Research, Research Report 36-56, November 9, 1956); *Report on Costs and Characteristics of Audit Program in Enforcement of the California Sales Tax* (Sacramento: Legislative Auditor, 1951); and Welch, Ronald B., *The California Sales Tax Sample Audit Program*, (California Board of Equalization, Division of Research and Statistics, February 1954).

tion costs include the personal service and maintenance expenditures to provide the necessary collection and enforcement machinery. Specifically, these would include outlays for salaries of administrators, field examiners, and assorted office personnel as well as for office rent, equipment, supplies, postage, telephone and telegraph communication, and traveling expenses. Capital expenditures can be important at the time the tax is first levied.

Retailers' compliance costs include any tax-induced record keeping costs, the costs of preparing tax returns, and the additional time required by sales clerks in computing the tax. When a retailer's records are examined or audited, additional demands are made on his time, and, if a dispute arises, there may be costs of negotiation and litigation. The compliance costs of consumers would involve time lost through controversy and misunderstanding over the amount of tax due, the annoyance of handling tokens or stamps, and, perhaps, the effort of seeking avenues for avoiding the tax. Industrial consumers and others filing use tax returns would experience compliance costs similar to those of retailers.

Problems of Interstate Comparisons

Some difficulties are encountered in making interstate comparisons of sales tax administration costs because: (1) the available cost data are not always comparable; (2) there are significant variations in statutory provisions; (3) geographical and institutional factors can affect administrative problems; and (4) administrative efficiency differs among the states. Complete and accurate cost data are sometimes difficult to obtain when a sales tax is administered by two or more departments or when total departmental administration costs are not segregated by type of tax. The temporal incidence of capital outlays can distort administration costs under varying accounting practices. Differences in tax rates, base coverage, and exemptions affect tax yields, which in turn affect cost of administration ratios. Administration costs can also be affected by differing administrative provisions and requirements. The presence or absence of trading centers near a state boundary or natural barriers along state lines can affect the "border problem." Perhaps even more fundamental is the problem of appraising the adequacy of a state's administrative efforts without information on the relative completeness of collections. The significance of any administration cost ratio must be tempered by this serious gap in knowledge.

Earlier Cost of Administration Studies

Mindful of the limitations inherent in the available data, the sales tax administration cost ratios for 1940 and 1948 are presented in Table 1, and it appears that the ratios are generally within limits considered reasonable by tax administrators. Since the data for the two years are from different sources, comparability cannot be assured. For example, the cost of $6.00 per $100 of revenues for Colorado in 1940 appears to include the vendors' discount whereas the value for 1948 does not. Vendors' discounts are not included in the data for the other states. Nevertheless, the median cost appears to have declined substantially from 1940 to 1948. At least two reasons may be cited for this decline: (1) sales tax yields increased faster than outlays for administration,

TABLE 1

STATE ADMINISTRATION COSTS OF COLLECTING $100 OF SALES AND USE TAX REVENUES, BY STATE, 1940 AND 1948

State	1940	1948
Alabama	$4.50	$2.23
Arizona	4.00[a]	1.25
Arkansas	3.00	2.00
California	2.60	1.84
Colorado	6.00	1.36
Illinois	2.00	2.00
Indiana	2.90	1.80[b]
Iowa	...	1.04
Kansas	2.50	...
Maryland	...	2.00
Michigan	1.70	0.96
Mississippi	3.60	1.61
Missouri	2.00	1.00
New Mexico	...	1.90
North Carolina	...	0.67
Ohio	1.90[c]	1.10[c]
Oklahoma	0.90	...
Rhode Island	...	1.16
South Dakota	...	1.52
Tennessee	...	1.12[d]
Utah	2.20	0.88
Washington	...	0.66
West Virginia	1.00[e]	1.00
Wyoming	3.10	1.50
Median	$2.55	$1.31

[a] From: Blakey, Roy G. and Blakey, Gladys C., "State Sales and Use Taxes," *Taxes—The Tax Magazine,* March 1942, p. 162.

[b] From: Back, Kenneth C., *The Indiana Gross Income Tax,* (Lexington: Bureau of Business Research, University of Kentucky, 1950) p. 50.

[c] Only represents costs of the Ohio Department of Taxation. Costs are also incurred by the State Treasurer, State Auditor, County Treasurers, and by appointed local agents. Total costs, excluding vendors' discounts, in 1948 amounted to $4.17.

[d] Estimated range: $1.00 to $1.25.

[e] Departments estimate.

Source: Except as noted the 1940 ratios adapted from—Martin, James W., "Cost of Tax Administration: Statistics of Public Expenses," *Bulletin of the National Tax Association,* February 1944; 1948 ratios adapted from: Malone, Paul E., "The Sales Tax," Report of the Revenue Laws Commission of the State of Illinois, Springfield, 1949, p. 263 and *State and Local Taxes in California: A Comparative Analysis,* Report of the Senate Interim Committee on State and Local Taxation, Part Three, Sacramento, 1951, Appendix B, p. A-381.

and (2) normal improvements were made in administrative procedures as the states gained experience with this type of tax. Considerable interstate variation in cost ratios is apparent; costs per $100 of revenues in 1948 range from $.66 in Washington to $2.25 in Alabama. If the various costs attributable to the prepaid stamp system are included, the Ohio cost ratio becomes the highest in the nation.

Administration Cost Survey

In order to obtain more recent cost of administration data, the Research Division of the Ohio Department of Taxation made a survey among 19 leading sales tax states, including the State of Ohio.[3] Not all of these states were able to supply complete and comparable information, but after the information of doubtful comparability was eliminated, the survey provided reasonably satisfactory cost of administration data for 12 states. These 12 states accounted for about two-thirds of all sales and use tax revenues collected in 1955. They include the four leading sales tax states from the standpoint of total collections, and they represent states from various parts of the country.

The actual collection costs (exclusive of discounts to vendors) per $100 of sales and use tax revenues among these states in 1955 ranged from $.85 in Michigan to $3.82 in Ohio; the weighted average cost for the 12 states amounted to $1.83 (Table 2). Three per cent sales tax rates were employed for the year under review by all of the states except Colo-

[3] *Costs of Administration, Retail Sales Taxes, Selected States* (Ohio Department of Taxation, Division of Research, Research Report, 1956).

rado, Illinois, Kansas, and Maryland; the latter states had 2.0 per cent rates. Because of the lower rates and correspondingly lower yields, the administration cost ratios for these four states are higher relative to the ratios of the other states. When the sales and use tax collections for all states were adjusted to represent yields with a 3.0 per cent tax rate, the average cost per $100 of collections became $1.66.

The weighted average ratio is affected to a significant degree by the unusually high administration costs shown for Ohio. The $7,919,069 reported for Ohio includes $2,102,350 for the usual personal service and maintenance costs reported by all states and $5,816,719 in various costs directly attributable to Ohio's prepaid stamp method of collection.[4] These costs in 1955 included: $273,448 for printing the stamps; $1,-

TABLE 2
STATE ADMINISTRATION COSTS OF COLLECTING $100 OF SALES AND USE TAX REVENUES, SELECTED STATES, FISCAL YEAR 1955
(Vendors' discounts are excluded)

State	Sales and Use Tax Collections (000's)	Cost of Administration (000's)	Costs Per $100 of Collections	
			Actual	Adjusted[a]
Ohio	$ 207,217	$ 7,919[b]	$3.82	$3.82
California	492,879	9,911	2.01	2.01
Florida	74,027	1,367	1.85	1.85
Maryland	34,999	616	1.76	1.17
Alabama[c]	58,932	988	1.68	1.68
North Carolina	58,413	923	1.58	1.58
South Carolina	46,649	737[d]	1.58	1.58
Illinois	207,343	3,073	1.48	0.97
Colorado	37,072	519	1.40	0.93
Kansas	50,502	647	1.28	0.85
Connecticut	60,917	574	0.94	0.94
Michigan	300,266	2,555	0.85	0.85
Total	$1,629,215	$29,828	$1.83[e]	$1.66[e]
Total (Excluding Ohio stamp costs)	....	$24,012	$1.47[e]	$1.33[e]

[a] Ratios are adjusted to represent collections at a 3.0 per cent tax rate for all states. The adjusted collections for the states with 2.0 per cent tax rates are as follows: Maryland—$52,498,178; Illinois—$317,361,024; Colorado—$55,608,448; and Kansas—$75,753,672. The adjusted total for collections is $1,800,520,238.

[b] Includes $2,102,350 in departmental personal service and maintenance costs and $5,816,719 in various costs attributable to the prepaid stamp system of collection but excludes vendors' discounts amounting to $3,882,624. The ratio exclusive of stamp costs is $1.01 and the gross ratio including vendors' discounts is $5.70.

[c] Fiscal year 1954.

[d] Incomplete, includes only wages and salaries.

[e] Weighted average.

Source: Survey among the selected states.

[4] For a detailed analysis of Ohio's administration

(See next page)

624,295 in commissions to county treasurers and private agents for selling the stamps to vendors; and $3,918,936 in redemption payments for cancelled stamps to individuals and qualified organizations. Since these stamp costs are unique for Ohio, they present a special problem in making interstate comparisons. If they are included, the Ohio cost ratio is by far the highest among the leading states. On the other hand, if only the personal service and maintenance outlays are included, Ohio's cost ratio becomes a modest $1.01 per $100 of revenues, and as a result the actual and adjusted average administration costs for all states become $1.47 and $1.33, respectively. The latter ratios are perhaps more representative of American state sales tax administration costs than the alternative ratios stated above which include Ohio's stamp costs.

Variations in administrative efficiency should not be imputed to interstate differences in administration cost ratios; a low ratio does not necessarily indicate efficient administration nor does a high ratio necessarily indicate profligate spending. It is entirely possible that a high cost ratio reflects intensive administrative efforts in an earnest attempt at more complete enforcement. The number of field examiners and auditors employed in the administration of a sales tax may shed some light on the relative administrative inputs. The states surveyed reported the following numbers of auditors and examiners in 1955:

TABLE 3

Total Number of Sales Tax Auditors and Examiners and Number Per Million Dollars of Revenue, Selected States, in 1955

State	Number of Auditors and Examiners	Number Per $1.0 Million of Revenues	
		Actual	Adjusted[5]
Maryland	63	1.80	1.20
North Carolina	98	1.68	1.68
California	735	1.50	1.50
Florida	111	1.50	1.50
Kansas	62	1.25	.83
South Carolina	56	1.20	1.20
Connecticut	66	1.08	1.08
Ohio	201	.97	.97
Tennessee	44	.80	.53
Michigan	219	.73	.73
Illinois	109	.53	.34
Washington	60	.48	.48
Average	...	1.06	0.96

Ideally, it would be meaningful to relate the number of auditors to the number of licensed vendors in a state. However, the data on the number of vendors are not comparable among the states because of differences in licensing requirements and variations in the number of inactive vendors included in the reported figures. Therefore, it seemed preferable to relate the number of reported examiners to actual sales and use tax yields even though the coverage of the tax bases varies among the states. It may be noted that the reporting states average slightly in excess of one examiner or auditor per $1.0 million of revenue; if revenues are adjusted to represent collections at a 3.0 per cent rate for all states, the ratio is slightly below one examiner per $1.0 million in revenues.

Generally, the states with the higher cost ratios also employ a greater number

costs see: Oster, Clinton V., *op. cit.*, pp. 166-180; and *Ohio Retail Sales Tax: The Audit Program and the Stamp Plan* (Ohio Department of Taxation, Division of Research, Research Report, January 21, 1955).

[5] Adjusted to represent collections at a 3.0 per cent rate for all states.

of auditors per $1.0 million of revenues. For example, California ranks high both in terms of sales tax administration cost ratios and in the number of auditors per $1.0 million of revenues, even with a highly productive tax. The California Board of Equalization has claimed, with considerable apparent justification, that the scale of its audit program is unique among the sales tax states.[6] Nevertheless, a recent study concluded that the California audit program still falls short of an optimum program if such a program is defined as that which by auditing maximizes the excess of misplaced tax detected over the cost of auditing.[7]

Michigan, on the other hand, reports the lowest administration cost ratio among the states surveyed. The low ratio may be explained at least in part by a highly productive tax and by a comparatively modest audit program. Relative to yields, Michigan employs less than one-half the number of auditors reported by California. The Michigan Department of Revenue has indicated that an additional 150 examiners would "pay substantial dividends to the state." [8] This is a common plaint among sales tax administrators; a recent survey found that only four out of 21 administrators considered the number of their examiners adequate.[9]

The costs reported in Table 2 do not include vendors' discounts which are granted in about one-half of all sales tax states. These discounts are often omitted from computations of cost of administration either because of their alleged purpose, or because of the fact that they do not generally represent "remittances" by the state and as such do not become conveniently recorded in general tax accounting. Some question exists as to the purpose or purposes of such discounts even where the sales tax statute makes specific reference thereto. Quite often students of public finance suggest that such discounts are to compensate vendors, in whole or in part, for costs incurred in their compliance with a consumer tax or that they serve to encourage prompt payment by retailers. It may also be possible that such discounts exist simply as a political necessity.

In any event, discounts represent deductions from the tax paid by the consumer and result in a net decrease in the amount of revenue otherwise available to the taxing jurisdiction. To the extent that costs of compliance are compensated for, such costs then become costs to the administering jurisdiction and should be considered in the overall appraisal of cost items.

Among the states surveyed, discounts range from 2.0 per cent in Ohio and Alabama to 5.0 per cent in Colorado. Michigan permits each vendor a deduction of $50 per month from taxable gross receipts. Regardless of motivation, such vendor discounts are a significant component in total administration costs, as illustrated by the states responding to the survey (Table 4). In every state authorizing ad valorem discounts, the cost of such discounts exceeded the state administration costs.[10]

Whether the above discounts approximate vendors' compliance costs is not

[6] California Board of Equalization, Annual Report, 1952-1953, p. 22.

[7] Welch, Ronald B., *op. cit.*, p. 19.

[8] Michigan Department of Revenue, *Annual Report*, 1950-1951, p. 6.

[9] Malone, Paul E., "The Sales Tax," Chapter XII, in *Report of the Revenue Laws Commission of the State of Illinois*, (Springfield: 1949), pp. 262-263.

[10] Ohio is an exception if stamp costs are included.

known because comparatively little empirical work has been done in this field. The available estimates place sales tax compliance costs from 2.3 to 6.0 per cent of taxes paid.[11] These studies and others in the general field of compliance costs indicate that such costs are highly variable among various taxpayers depending on the type of business and the amount of tax payable.[12] Such costs may also differ significantly among the states because the extent of the requirements imposed on vendors by the respective sales tax statutes varies considerably. For example, Ohio's stamp plan undoubtedly increases costs in time and motion at the time of making sales in contrast with the collection methods used in other states. A tax base narrowed by numerous exemptions and exclusions would increase the problem and costs of segregating taxable and nontaxable sales on the vendors' records. These considerations raise the possibility that vendors' discounts are inadequate for some vendors and result in substantial subsidies to others. If this be the case, it suggests that there is at least equal merit in the practice of 17 states in not providing for vendors' discounts, leaving it to vendors to recoup such costs through the price mechanism.

TABLE 4

VENDORS' DISCOUNTS, SELECTED STATES, IN 1955

State	Amount of Discount (000's)	Discount As a Per Cent of Yield
Colorado	$1,828	4.93
Maryland	1,082	3.09
Florida	2,144	2.90
Oklahoma	1,249	2.87
North Carolina ..	1,610	2.76
South Carolina ..	1,280	2.74
Missouri	2,311	2.55
Louisiana	1,323	2.04
Tennessee	1,124	2.04
Ohio	3,883	1.87

Summary

State sales tax administration cost data must be selected and analyzed with considerable care in order to assure comparability. Not all states are able to supply suitable data in a routine manner, but in a survey among 18 states reasonably satisfactory cost data from 12 leading states were obtained. Since these 12 states account for about two-thirds of total state sales and use tax collections, their administrative cost experience is of considerable importance.

On the basis of this survey, it appears that, exclusive of vendors' discounts in those states making such allowances, the average cost of collecting $100 in sales and use tax revenues amounts to $1.47. If all states are assumed to have a 3.0 per cent tax rate, the average cost becomes $1.33 per $100 of revenues.

Considerable variation in cost ratios among the states is apparent; they range from $0.85 per $100 of revenues in Michigan to $2.01 in California and $3.82 in Ohio. However, if Ohio's

[11] See: Haig, Robert M., "The Cost to Business Concerns of Compliance with Tax Laws," *The Management Review* (November 1935) pp. 323-333; Martin, James W., "Costs of Administration: Examples of Compliance Expenses," *Bulletin of the National Tax Association* (April 1944) p. 203; Edelmann, Chester M., "The Sales Tax From the Retailers' Point of View," *Revenue Administration;* proceedings of the Seventeenth Annual Conference, National Association of Tax Administrators, 1949; and "Costs of Sales Tax Compliance," address delivered before the Third Annual Conference of the Southeastern States Association of Tax Officials, Edgewater Park, Mississippi, May 28, 1953, p. 5.

[12] See: Oster, Clinton V. and Lynn, Arthur D., "Compliance Costs and the Ohio Axle Mile Tax: A Case Study," *National Tax Journal* (June 1955) p. 22.

unique prepaid stamp costs are excluded, Ohio's ratio becomes $1.01. The available evidence does not support the conclusion that a low administration cost ratio indicates administrative efficiency. No reliable information is available on the relative completeness of tax collections among the states. However, the states with the higher cost ratios generally have a relatively greater number of field examiners or auditors. Undoubtedly, a well conceived and vigorous field audit program contributes to a more complete collection of revenues due the state. Further research is needed in the individual states to appraise adequately the scope and utilization of existing enforcement programs.

Vendor's discounts, authorized in 16 sales tax states, are more significant than state administration costs. These discounts may be motivated by a desire to encourage a prompt payment of the tax by vendors and to compensate vendors for their compliance costs. Available studies suggest that vendors' compliance costs are highly variable and cast considerable doubt on the appropriateness of a flat percentage discount to vendors.

THE AFTERMATH OF THE SHOUP TAX REFORMS *

PART I

M. BRONFENBRENNER AND KIICHIRO KOGIKU †

" We see no reason why Japan may not within a few years, if she so desires, have what would be the best tax system in the world. In any event, the consistent aim of this report has been to keep open the road that may lead to that goal." *Shoup Report.*

" The Shoup tax system established in both our local and our national taxes a colonialistic pattern of exploitation . . . to make the Japanese economy bear directly as much as possible of the expense for maintaining and expanding American and Japanese armed forces and for the militarization of the Japanese economy . . . by strengthened fiscal exploitation and reduction of non-military expenditures." *Nihon Shihon-Shugi Koza* (*Lectures on Japanese Capitalism*).

I

THE limited success of financial reform programs suggested by Western experts in " under-developed " and " reconstructing " countries since 1945 is a matter of reasonably common knowledge. When results have fallen short of expectations, it is usual to blame the reforming missions (handicapped as they were by unfamiliarity with the institutions of the country they were reforming) or to blame the countries concerned for refusing mission proposals the fair test of enactment and whole-hearted enforcement.

For the Shoup Mission, which recast the Japanese national and local tax systems under the aegis of General MacArthur in 1949, these reasons apply in minimal degree. The seven-man Mission, headed by the eminent tax economist Carl Shoup of Columbia, was itself outstanding.[1] Its program received

Editor's note: Part II of this study contains a discussion of the causal factors which appear to explain the Japanese modifications of the Shoup tax system; it will be published in December.

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[1] The other members were:

Professor William Vickrey of Columbia, an economic theorist and tax economist, author of *Agenda for Progressive Taxation* (New York: Ronald, 1947).

Dean Howard R. Bowen of Illinois (now President of Grinnell), a social economist with banking experience.

Professor (now Dean) William Warren of Columbia and Professor Stanley Surrey of California (now head of Harvard Law School's International Program

(See next page)

General MacArthur's approval and cooperation upon its publication in August, 1949; [2] it was substantially enacted piecemeal by the Japanese Diet in the following year. Deficiencies naturally existed: none of the Mission remained in Japan more than five months, and some considerably less; [3] the modifications in the Shoup program as finally enacted proved more serious than many realized at the time. But if the Shoup program proved only a limited and partial success, reasons must be sought more fundamental than inadequacies of Mission personnel and Japanese refusal to try the program out.

The Shoup tax reform is interesting, then, as a case study of the accomplishments of a Western tax mission in a short period under (nearly) ideal conditions. It is interesting more particullarly to Americans as a case study of an Occupation-sponsored, and therefore American-sponsored, economic reform in Japan, and of how Japan modified it after restoration of her independence in 1952.[4]

in Taxation), two of America's leading legal scholars in taxation.

Rolland Hatfield, Director of Tax Research, State of Minnesota, an experienced local tax administrator.

Professor Jerome B. Cohen of C.C.N.Y., a specialist of Japanese economic institutions, author of *Japan's Economy in War and Reconstruction* (Minneapolis: Minnesota, 1949) and *Economic Problems of Free Japan* (Princeton; Princeton, 1952).

2 *Report on Japanese Taxation by the Shoup Mission.* 4 vols; Tokyo: SCAP, 1949. (Referred to as *Shoup Report.*)

3 Four members of the Mission (Shoup, Vickrey, Warren, Surrey) also made a one-month visit to Japan in August-September 1950, and prepared a supplementary report. Shoup Mission, *Second Report on Japanese Taxation* (Tokyo: Japan Tax Association, 1950).

4 A more detailed study of another aspect of Occupation economic policy and its immediate results is T. A. Bisson, *Zaibatsu Dissolution in Japan* (Berkeley and Los Angeles: California, 1954). The Occupation land reforms have also been studied intensively.

II

The Shoup system was not the first Occupation reform of the Japanese tax system. In fact, understanding of the Shoup plan requires some reference to the equally Occupation-inspired system of 1946-49, together with the reasons for its replacement.

The initial Occupation tax reforms featured (1) higher and more progressive personal income taxes, with low exemptions and therefore broad coverage, (2) higher corporate and excess-profit taxes which did not permit taxpayers to adjust depreciation allowances for the drastic price inflation, (3) a heavy capital levy upon wealth, and (4) an increase in the number of sales and excise taxes, including a turnover tax. Quite inadequate as a revenue source in the early years of the Occupation, this system eventually played an important part in halting inflation in 1948-49.[5] At the same time it developed certain defects which the Shoup Mission was asked to remedy. The most important of these were three in number:

1. The personal income tax swamped and demoralized the tax administration. Collection was by the "goal system," with each tax office assigned a goal or

A recent survey of their results is John D. Eyre, "Post-Occupation Conditions in Rural Japan." *Annals of the American Academy* (Nov. 1956), pp. 113-120. See also L. I. Hewes, *Japan, Land and Men* (Ames, Iowa: Iowa State, 1955). No general survey of Occupation economic policy and the post-1952 Japanese reaction has yet appeared, beyond SCAP's self-laudatory *Mission and Accomplishments of the Supreme Commander for the Allied Powers in the Economic, Scientific, and Natural Resources Fields* (Tokyo: SCAP, 1952).

5 For a more favorable view of these tax reforms, see two articles by Henry Shavell, "Postwar Taxation in Japan," *Journal of Political Economy* (1948) and "Taxation Reform in Occupied Japan," *National Tax Journal* (1948).

quota. Each office met its quota by arbitrary upward reassessment of the reported liabilities of all taxpayers, honest men and evaders alike. This was not completely an Occupation innovation, and was not unknown in the traditional Japanese system. But whereas its inequities had been tolerable at the low pre-war rates and high pre-war exemptions, they were tolerable no longer.[6] Cases of reassessments in excess of total income received wide press publicity. Tax officials rivalled the prewar "thought police" in the hatred they inspired. Radicalism was gaining ground rapidly among the victims of reassessments "handed down from Heaven" (*ama-kudari*).

2. Business firms, whether corporate or non-corporate, could not replace capital internally (let alone expand it) without evading their tax obligations. Corporate income and especially excess-profits tax rates were high, and depreciation allowances came to bear no relation to existing price levels.

3. Tax sources remained concentrated in the National Government, despite the allocation of a great volume of public functions to prefectures and municipalities by the Occupation in the name of local autonomy. Local autonomy was foundering as a result, because of the dependence of the local units upon variable and capricious grants from Tokyo. To some extent the variability and unreliability of these subventions was compensated, as it had been for years, by extra-legal reliance on "voluntary contributions" (*kifukin*). These, being unbudgeted and likewise not accounted for, were frowned on by the Occupation as sources of financial abuse.

Starting with this difficult and unhappy situation, the Shoup Mission revised the Japanese tax system along lines generally familiar to Americans, adding, however, a number of novel features designed to give Japan "the best tax system in the world."[7] Details of the proposals are presented in Appendix Tables A-G, together with some subsequent history of each.[8] A literary summary of the main aims and innovations of the Shoup system may nevertheless be in order as a guide and introduction to the Tables:

1. In view of the anti-tax and anti-inflation sentiment of Japan in 1949, the first necessity for the Shoup Mission was the provision of a tax cut for every Japanese without unbalancing the budget or otherwise producing inflationary consequences. (Hindsight suggests a certain futility in the Mission's anti-inflationary concern, since the Korean War brought on a renewed burst of inflation the following year.)

[6] The Japanese income tax has a relatively long history, dating from 1887. For a brief summary in English, see Hanya Ito, "Direct Taxes in Japan and the Shoup Report," in *Essays in Public Finance* (Tokyo: Science Council of Japan, Division of Economics and Commerce, Economic Series No. 3, 1954), p. 89 f. Originally published in *Public Finance* (1953). (I have also had access to an unpublished dissertation by Kotaro Ikeda, "The Establishment of the Income Tax in Japan," which gives more detail on the earlier period.)

The tax was a relative minor revenue source, however, until 1919, and its scale remained relatively low prior to World War II. For a representative pre-war year (1935) there were only 942,000 taxpayers, who were assessed 4.4 per cent of their reported gross income. The corresponding figures for the last year of the initial Occupation system (1949) were 21,098,000 taxpayers, assessed 16.1 per cent of their reported gross income. See Motokazu Kimura, "Conditions for Direct Taxation," *Annals of the Hitotsubashi Academy* (1952), p. 164.

[7] *Shoup Report*, vol. I, p. ii.

[8] We are indebted to two Japanese agencies who prepared similar tables as exhibits for the use of the Government's Emergency Tax System Research Committee of 1955-56: the Taxation Bureau, Finance Ministry, and the Japan Tax Association.

2. The progressive and broad-based personal income tax was to be retained as the mainstay of the Japanese national tax structure. This was the first time anything of the kind had been attempted in the Orient, although Japan has had small-scale experience with schedular income taxes since 1887.

Such a great emphasis of a progressive and broad-based personal income tax required a number of changes designed to induce and maintain adequate compliance by self-assessed taxpayers. Among these changes were: reduction of top bracket rates at some sacrifice of progression on paper; increase of personal exemptions and dependent credits; encouragement of record-keeping by taxpayers; [9] special treatment of fluctuating incomes by a simple averaging plan; and permitting large Oriental " co-living families " to split most types of income for tax purposes among their several branches. The Shoup plan provided for taxation of realized capital gains on the same basis as ordinary income with " constructive realization " at death or other transfer, but this provision was balanced by full deduction of capital losses, by loss carry-forward and carry-back provisions, and by the special treatment of fluctuating incomes.

Also requisite to increasing the equity of the income tax and the furthering of voluntary compliance were elimination of a number of features which the Mission considered abuses. The most important of these was the system of anonymous accounts and securities, on which interest and dividends escaped taxation other than at source. Another Shoup proposal to the same end was reduction of earned-income credits for wage-earning taxpayers whose income tax was withheld. The theory of such credits relied on the superior opportunity of the self-assessed taxpayer to escape taxation, and the existence of the credits seemed to Shoup an invitation to the self-assessed to evade their obligation.[10] A more specifically Japanese practice opposed by the *Shoup Report* was " collective bargaining " with local trade associations on the total tax liabilities of their memberships, which the association then allocated among the members (plus a surcharge for itself). Finally, the " goal system " of tax collection was strongly attacked, with its fixed geographical quotas and the accompanying danger of arbitrary re-assessments in meeting them.

3. The Shoup Mission's main concession to the Japanese demand and need for private capital accumulation was found in provisions for revaluating land and fixed capital in the light of the wartime and post-war inflation. This revaluation, up to limits set by price index numbers, was designed to allow accumulation of adequate depreciation reserves and to prevent the draining away of these reserves in income taxes. The Shoup plan, however, included a number of safeguards against over-capitalization. Most important of these was a special tax on the revaluation amount. Another provided for a delay period, within which the revaluation amount could not be included in capital for the purpose of floating new securities. A third provided for assessment of revalued property for local property taxation at the revalued figures.

Other concessions to capital formation in business taxation were repeal of

[9] Taxpayers keeping records could submit their returns on special blue forms, together with the supporting data. If these data were adequate, returns on blue forms could not be re-assessed arbitrarily.

[10] *Shoup Report*, vol. I, pp. 68-72.

the national excess-profits tax and the local busines income or "enterprise" tax, together with the lowering of the normal corporate income tax rate to 35 per cent, below the contemporaneous American level.

4. Japan's pressing revenue needs prevented the Shoup recommendations from implementing another professed Mission purpose—minimizing indirect and consumption taxes. The recommendations included the repeal of the national turnover tax and the national textile consumption tax, plus reduction in both the number and rates of a long schedule of national commodity excises. At the prefectural level, on the other hand, repeal of the enterprise tax was to be compensated by a new sales tax along the "value-added" lines which have become familiar subsequently following experience in France and in the State of Michigan.

5. Provision of a fiscal framework for local autonomy was as important as any other purpose of the Shoup system. Its principal form in the *Shoup Report* was the reduction or elimination of shared national taxes in the interest of greater tax consciousness in the prefectures and municipalities. Offsetting this reduction (and also offsetting to some extent increased local tax-consciousness) was to be an increase in the volume of outright National Government grants-in-aid, with reduced discretion in their allocations both among functions and among areas. Allocation was to be determined in large measure by algebraic formula. This was the so-called "Equalization Grant," in which the needs of local units were computed in standard statistical terms and the taxable capacities of the same localities were estimated for standard rates of standard taxes. Increased needs increased a given district's share of the national equalization grant, while increased taxable capacity operated in the opposite direction.

As already mentioned, sales taxation was to be shifted from the national to the prefectural units, while changing its form from the turnover to the value-added type. In the municipalities, inclusion of machinery and equipment (revaluated upward) along with real estate was to increase the property tax base, while rates were subject to supervision by the Local Autonomy Agency (an independent bureau of the National Government). The sum total of these changes was expected to make both prefectures and municipalities independent not only of National Government domination but also of extra-legal, semi-voluntary *kifukin*.

6. The Shoup system included several novel fiscal experiments, which the Mission suggested for Japan without benefit of large-scale experience in other countries. Three of these should be mentioned more particularly: the net worth tax; the accessions tax, and the value-added sales tax.

The net worth tax was to be a National Government levy on property in all forms, but with high exemptions. Its revenue purpose was to make up revenue lost by lowering the top bracket rates of the personal income tax. More important, however, were its proposed functions in other directions. Net worth tax returns were to be used as checks in income tax enforcement, and vice versa. The net worth tax was to compensate for the loss of progression in the individual income tax, and also replace the earned income credit as a discriminating feature as between earned and unearned income.

The *Shoup Report* put all succession taxes (estate and gift taxes) on an accessions basis, meaning that each recipient of gifts or bequests would be taxed cumulatively on the total of gifts or bequests received, while the donor went tax free. This plan was designed to encourage the dispersion of large estates, and perhaps further to penalize the traditional Japanese practice of preserving family fortunes by concentrating them in single heirs.

The value-added tax became the most controversial single proposal of the *Shoup Report*. It represented a first attempt to put into practice a proposal which had become well known because of a long history in public finance literature.[11] Granting the desirability of some form of sales tax for the Japanese prefectures (which all critics may not do), the Mission considered value-added taxation preferable to retail sales taxation in a country like Japan, where small retailers are too numerous for adequate enforcement of the latter tax. At the same time, the Mission considered value-added taxation preferable to manufacturers' sales taxation or turnover taxation, since it avoided in large measure the cumulation features of the last-named taxes and the favoritism to integrated companies shown by the turnover tax.[12]

III

Under these same six heads we may summarize our tabular results dealing with Japanese reactions to and modifications of the Shoup system. Most generally we may say that through 1956 the Japanese national tax system retained the essential features of what one newspaper called the " patched and tattered " (*tsugi-hagi-darake*) Shoup plan,[13] while the local tax system had departed further from the Shoup framework. On the same level of extreme generality we may say that when the Japanese departed from the Shoup system, the departures were in the direction not of further experimentation but of return to pre-war Japanese traditions and practices, which the Japanese Government considers particularly suitable to Japan's economic situation.

1. The Shoup Mission carried out in a formal sense its purpose of providing some tax relief for every Japanese taxpayer. The relief, however, was accompanied by reduction in rice and other subsidies. These raised food prices, perhaps enough to over-balance the tax cut for some classes of the population, particularly the unmarried wage-earners.[14] The tax cut was accordingly considered fraudulent in labor and Leftist circles.[15]

[11] For a survey of this literature, see Ito, " The Value-Added Tax in Japan," *op. cit.*, ch. 2, pp. 26-28 (originally published in *Annals of the Hitotsubashi Academy*, 1950).

[12] Cf. *Shoup Report*, vol. II, pp. 200-204.

[13] *Mainichi*, Sept. 1, 1955.

[14] " Unmarried," because single individuals did not gain from the Shoup rise in dependent credits. " Wage-earners," because they suffered by the Shoup cut in earned income credits.

The cut in rice and other food subsidies was not recommended by the Shoup Mission but by other American technical advisors to SCAP, notably Joseph M. Dodge (later U. S. Budget Director). Japanese confusion between Dodge and Shoup is understandable since their recommendations came in the same year (1949). Treating the two as a team, and thereby ascribing chicanery to Shoup, is however unwarranted.

[15] Influential Leftist attacks on the Shoup Mission have been written by Seijiro Usami *et al.*, " Basic Characteristics of Post-War Public Finance," and Uyahiko Shima, Takao Takeda, Mutsuo Kato *et al.*, " The True Facts of Post-War Public Finance," both in *Nihon Shihon-Shugi Koza* (*Lectures on Japanese Capitalism*) (7 vols; Tokyo: Iwanami, 1953-54),

(See next page)

The Japanese Government went from the outset further than the *Shoup Report* in cutting income taxes for the typical Japanese worker, farmer, and small business man. This was done by raising exemptions and dependent credits more than Shoup recommended, and by cutting earned income credits less than Shoup recommended.[16] It was offset to some extent by retaining and even increasing indirect taxes.

2. The personal income tax remains broad-based, remains progressive, and remains the mainstay of the national tax system. Its relative importance, however, is falling, as can be seen from Table 1. One may forecast continuance of this trend; the report of the Government's Emergency Tax System Research Committee, for example, proposes a major shift in emphasis from direct to indirect taxation, with a cut of 100 billion yen in income tax for the 1957 fiscal year.[17]

TABLE 1

THE PERSONAL INCOME TAX IN THE JAPANESE NATIONAL REVENUE SYSTEM, 1946–55

Fiscal Year	Total Tax Revenue *	Personal Income Taxes	
	Billion Yen	Billion Yen	Per Cent
1946	37.4	12.2	32.6%
1947	189.6	79.3	41.8
1948	447.7	190.8	42.6
1949	636.4	278.8	43.8
1950	570.9	220.1	38.6
1951	723.1	225.7	31.2
1952	843.0	269.9	32.0
1953	942.5	292.3	31.0
1954	924.1	285.6	30.9
1955	892.3	269.9	30.2

* Including stamp revenue and government monopoly profits.

Source: Bank of Japan, *Economic Statistics of Japan* (1955), Table 95, p. 189.

More important, the tax itself is undergoing modifications of which the Shoup Mission would hardly have approved. The tax has moved in a *schedular* or *classified* direction. Certain types of income are exempt, (bank interest and other property income which can be funnelled through anonymous accounts).[18] Other types are taxed on

vols. IV and V respectively. Also by Kenji Yoshioka, "Fiscal Exploitation and the Shoup Recommendations," in *Senryo-ka Nihon no Zaisei-Mondai* (*Financial Problems of Occupied Japan*) (Tokyo: Aoki, 1955), ch. 7.

On the present issue, Yoshioka is most directly in point. He states that the average worker earning less than 28,000 yen per month (i.e., the great majority of the Japanese working class) lost more in higher food prices than he gained in lower taxes. (*Op. cit.*, p. 143.) His source is, however, not an empirical survey but a forecast made by the Economic Stabilization Board of the Japanese Government well in advance of the enactment of any of the Shoup recommendations.

16 Even these larger tax cuts are considered fraudulent by Yoshioka, because inflation simultaneously forced taxpayers into higher brackets. For example, he cites data to indicate that a farmer with 7.5 *tan* of land paid higher total taxes in 1952, after the Shoup reforms and two years of further Japanese Government cuts, than he did in 1949 under the initial Occupation system. (*Op. cit.*, pp. 139, 316 Table 13.) The same point is made by the conservative *Oriental Economist* (May 26, 1951), p. 409.

Shima *et. al.* (*op. cit.*, pp. 358-62) see in the cutting of rates balanced in part by reduced earned income credits, a political maneuver "designed to split workers off from farmers and small business men and break up the anti-tax front."

17 Rinji Zeisei Chosa Kai, *Toshin* (Emergency Tax System Research Committee, *Report*) (December, 1956), (Tokyo: Finance Ministry, 1956), pp. 2ſ, 5f.

18 No ban on anonymous accounts and securities was ever enacted into Japanese law. A Finance Ministry ruling sought to carry out the Shoup recommendation administratively in 1950, but was repealed the following year because of opposition by Japanese banking and securities interests. The loophole thus kept open for property income receivers inspired demands for similar concessions to others, with unhappy consequences for the entire Japanese income tax and the entire Shoup system. ("For want of a nail, the shoe was lost . . .") It was in apprehension of just such a development that the Shoup Mission said (*Shoup Report*, vol. I, p. ii): "What we are recommending here is a tax system, not a number of isolated measures having no connection with one another. All of the major recommendations, and many of the minor ones, are interconnected. If any of the major recommendations are eliminated, some of the others will thereby become of less value or even harmful."

(See next page)

separate schedules (retirement income, forestry income). For the wage earner, the earned income credit has been increased.

Furthermore, the proportion of the tax collected at source (i.e., from wage and salary earners) has continued a rise already in evidence when the Shoup Mission came to Japan, while the proportion collected from self-assessed taxpayers (rentiers, farmers, and businessmen) has fallen sharply. (See Table 2.) The downward trend in self-assessed income tax receipts is ascribed by many Japanese primarily to the incorporation of many small and medium-sized business firms, and the table shows it to have been accompanied by a rise in the relative importance of corporate income tax receipts. There is nevertheless grounds to fear that it reflects at the same time some deterioration of enforcement, so that the Japanese income tax may become in time little more than a disguised payroll tax. It has exemptions, to be sure, and progressive rates which the ordinary " payroll tax " does not have, but it may still be a payroll tax in the sense of hitting primarily wage and salary earners, while leaving the rest of the population relatively untouched.[19]

Regardless of the outcome in terms of legislation, however, two major administrative improvements seem to have caught hold and thereby increased the rule of law in income tax practice. One of these is the reduction of the scope of individual and especially collective bargaining on tax liabilities between taxpayers and tax offices. The other is the " blue return " with its encouragement of record-keeping and its safeguards against arbitrary reassessment.

TABLE 2

Components of Japanese National Income Tax Structure, 1947–53

Fiscal Year	Corporate Income Tax		Withheld Personal Income Tax		Self-Assessed Personal Income Tax	
	Billion Yen	Per Cent	Billion Yen	Per Cent	Billion Yen	Per Cent
1947	7.1	8.2%	27.9	32.3%	51.3	59.5%
1948	27.9	12.8	76.4	34.9	114.4	52.3
1949	61.2	18.0	141.5	41.6	137.2	40.4
1950	83.7	27.6	127.5	42.0	92.6	30.4
1951	149.4	38.9	132.2	34.5	102.2	26.6
1952	186.0	40.8	186.8	41.0	83.0	18.2
1953	170.1	38.9	191.8	43.9	75.3	17.2

Source: Motokazu Kimura, " Taxation and Capital Accumulation," *Annals of the Hitotsubashi Academy* (1953), Table 7, p. 35.

3. The Japanese Government again went beyond the Shoup Mission to encourage capital formation, sometimes at the expense of fiscal equity. The asset

The newspaper *Nihon Keizai* was in the forefront of the fight to retain anonymity in the interests of saving, capital formation, and a " democratized " security market. (See articles and editorials dated Sept. 27 and 29, Oct. 21 and 30, 1949; Jan. 10, 1950; Aug. 17, 1953.) Tanzan Ishibashi, previously Finance Minister and subsequently Premier, suggested on one occasion that the Government refrain from investigating non-anonymous accounts and security holdings as well, and for the same reasons! " Ways for Japan's Economic Survival," *Oriental Economist* (Aug. 18, 1951), p. 649.

19 Shima *et al.* (*op. cit.*, pp. 358-62) put the argument in Marxian terms. An income tax should be on " surplus value only," and the prewar Japanese income tax was such a tax. The postwar Japanese income tax, however, is not. " Progressive taxation on wages is regressive taxation on surplus value."

revaluation plan was carried out, but firms which delayed their revaluations profited by repeal of the revaluation gain tax and of the other Shoup safeguards against over-capitalization.[20] Special privileges given capital gains and interest and dividend income under the personal income tax were justified as necessary inducements to save and invest, along with secrecy of accounts and deposits, accelerated depreciation, and a number of special reserves. (See Appendix Tables A and C.) On the other hand, the local enterprise tax remained in effect, without being replaced by the value-added tax or by any alternative form of local sales tax.

4. The Shoup Mission's pressure toward reduction of the number and rates of commodity excise taxes, and of the relative importance of indirect taxation generally, has been turned aside and reversed, ostensibly to protect the standard of living of the lowest income groups and to encourage capital formation at the same time. The present trend, which may be accelerated by the Report of the Emergency Tax System Research Committee in late 1956, is toward an increase in the number of commodity taxes on luxuries, semi-luxuries, and even "conventional necessities" like sugar and gasoline.[21] When the revenue of the Japan Monopoly Corporation (derived primarily from the sale of tobacco products, salt, and camphor) is included among the indirect taxes, the proportionate share of direct taxes in Japan's national tax revenue appears slowly to be falling, after having approached 60 per cent in the first fiscal year after the Shoup Mission (See Table 3.) It remains however well above the prewar average of 35 per cent.[22]

TABLE 3

DIRECT TAXES IN JAPANESE NATIONAL REVENUE SYSTEM, 1946–55

Fiscal Year	Tax Revenue *	Direct Taxes †	
	Billion Yen	Billion Yen	Per Cent
1946	37.4	21.1	56.4%
1947	189.6	93.1	49.1
1948	447.7	221.8	49.5
1949	636.4	344.2	54.1
1950	570.9	313.0	54.8
1951	723.1	424.0	58.6
1952	843.0	472.9	56.1
1953	942.5	505.4	53.6
1954	924.1	495.8	53.7
1955	892.3	473.2	53.0

* Including stamp revenues and government monopoly profit.

† Including: Personal income tax, corporate income tax, increase revenue tax, excess profits tax, succession taxes, and revaluation tax, and net worth tax.

Source: Bank of Japan, *op. cit.*, p. 189.

5. Passing to local taxation, we find its relative importance increasing much as Shoup suggested, but on the other

[20] The conventional Japanese criticism of these safeguards is that they are unnecessary. Over-capitalization carries its own penalty in Japan, or so it is alleged, in the form of inability to earn the normal rate of return on a company's equity securities and the subsequent fall of these securities on the stock exchange. There is sufficient competition to prevent any danger of over-capitalization being passed on to consumers in higher prices. (We are indebted to Professors Kiyoshi Nagata and Junichi Takagi of Keio University for exposition of these arguments, but also see *Nihon Keizai*, Aug. 27 and Oct. 8, 1949; Jan. 24, Apr. 30, and Oct. 15, 1953.)

From the Left, there was objection to any revaluation at all, or at least on any terms advantageous to private capitalists. Yoshioka (*op. cit.*, p. 140) puts it this way: "It is Shoup's 'rationalism' not to revaluate human beings, that is, not to raise wages to keep up with inflation, but to recognize the revaluation of 'things.'"

[21] The increase in sugar excise yield from 748 million yen to 44,506 million yen between fiscal years 1950 and 1955 brings out the point most clearly. Bank of Japan, *Economic Statistics of Japan*, 1955, Table 95, p. 190.

[22] Emergency Tax System Research Committee, *op. cit.*, Table 42, p. 142. (The prewar percentage given is 34.8, and is an average for three "normal" fiscal years 1934-36 inclusive.)

hand few of the specific Shoup reforms have been retained. Shared taxes have been revived, although the taxes shared and the method of sharing are not as before the war. The Equalization Grant is gone; national grants to local units are largely *ad hoc* and have the traditional strings attached. The prefectures and municipalities, with insufficient resources for "local autonomy," have returned many functions (education and police particularly) [23] to national authorities in whole or in part without much opposition.

6. The fiscal innovations of the *Shoup Report* have disappeared from the Japanese scene after brief trials or no trials at all. The net worth and accessions taxes were repealed in 1953, ostensibly because of inadequate yields. The enactment date of the value-added tax was postponed twice, and finally the tax was repealed without ever having gone into effect.

[23] Financial considerations, while important, were not the dominant reasons for partial restoration of national control over education and police.

APPENDIX TABLE A

PERSONAL INCOME TAX (SUBSTANTIVE)

SHOUP RECOMMENDATION	JAPANESE LEGISLATION, 1949-56
1. *Type of Tax*	
To be single, not schedular.	Carried out. Subsequent Japanese moves toward schedular income tax: Special treatment of bank interest and dividends. Special treatment of retirement income and forestry income.
2. *Personal Exemption*	
To be raised from 15,000 to 24,000 yen.	Carried out. Subsequent legislation has raised exemption to 80,000 yen (1955).
3. *Dependent Credit*	
To be changed from tax to income credit, raised from 1800 yen per return to 12,000 yen per dependent.	Carried out. Dependent credit subsequently raised several times. Situation as of 1955: 40,000 yen credit for first dependent, 25,000 yen credit for second and third dependents, 15,000 yen for other dependents.
All persons obtaining over 50% of support from taxpayer to be eligible for dependent status, regardless of relationship to taxpayer.	Carried out. Term "dependent" subsequently limited to spouse and other relatives living in taxpayer's household and having income below 40,000 yen.
4. *Treatment of Undivided Family*	
Taxation basis to be changed from "large" to "small" co-living family.	Carried out, but old system continued for family businesses not filing on blue returns.
5. *Earned Income Credit*	
To be lowered from 25% on first 150,000 yen of earned income to 10% of first 200,000 yen, and eventually abolished.	Carried out as 15% credit on first 200,000 yen of earned income. Subsequent legislation raised income limit to 400,000 yen and raised relief to 20%.
6. *Top bracket Rates*	
To be lowered to 55% from 85%, with no graduation above 300,000 yen bracket.	Carried out. Top bracket rate raised to 65% (1953) for increment over 5,000,000 yen.

APPENDIX TABLE A (*Continued*)

Shoup Recommendation	Japanese Legislation, 1949-56
7. *Fluctuating Incomes*	
To be spread over 5-10 yrs., tentative tax paid on total amount at rate appropriate to normal income.	Carried out. Subsequent legislation excluded capital gains, forestry income, temporary income, and retirement income from averaging system. Averaging system modified: fluctuating income in excess of average of preceding two years spread over next five years; tax levied on total amount.
8. *Capital Gains and Losses*	
To be included fully in income at time of realization, and treated as form of fluctuating income.	Carried out. Half of capital gains above 150,000 yen made taxable (1953); all losses continued deductible; first 150,000 yen made tax free. Both gains and losses from security sales disregarded. Other temporary income treated in same way.
"Constructive realization" of capital gains and losses to be instituted on property transferred without a sale.	Carried out. Repealed (1952) as regards bequests and gifts.
9. *Bank Interest Income*	
Source collection (separately from other income) to be abolished.	Carried out, but old system revived at 50% rate (1951); rate cut to 10% (1953); bank interest income made tax free (1955).
10. *Dividend Income*	
Source collection (separately from other income) to be abolished.	Carried out. Old system revived (1952).
11. *Dividends Paid Credit*	
To be raised to 25% (from 15%).	Carried out. Credit raised to 30% (1955).
12. *Depreciation*	
"Declining balance" method no longer to be compulsory; taxpayers to have choice among alternative accounting systems.	Carried out.
Greater accuracy recommended in estimating life of depreciable assets; no recommendation of acceleration.	Accelerated depreciation permitted (1952) for machinery, equipment, vessels, and rental housing "contributing to reconstruction and rationalization." Special treatment in different categories.
Greater care recommended: Distinguishing repairs from capital expenditure. Disallowing double deduction of expenses and depreciation. Disallowing capital expenditures as business expenses.	Carried out.
13. *Loss Carry-Forward and Carry-Back*	
5-year carry-forward, 2-year carry-back to be permitted taxpayers keeping adequate records. Not applied to unused credits and exemptions.	Carried out, with carry-forward limited to three years.
14. *Special Reserves*	
Bad debt reserves to be permitted for first time.	Carried out, for concerns using blue returns. Other reserves later permitted blue-return taxpayers: price fluctuation reserve, retirement allowance reserve, special repairs reserve, export loss reserve.
15. *Special Deductions*	
Physically incapacitated to be allowed $1\frac{1}{2}$ personal exemptions.	Carried out. Social insurance and life insurance payments made

APPENDIX TABLE A (*Continued*)

SHOUP RECOMMENDATION	JAPANESE LEGISLATION, 1949-56
Special deductions to be allowed for business losses or medical expenses in excess of 10% of net income.	deductible also (1953). Medical deduction expanded (1953).
16. *Special Measures for Particular Industries*	
Not considered by Shoup Mission, perhaps through oversight.	Individuals mining or producing certain metals and minerals, generating electricity, manufacturing fertilizers or synthetic fibers exempt from income tax for first four years of operation. Same exemption for income derived from expansion of facilities. Trading firms allowed special deductions based on amount of exports, special depreciation on equipment for overseas branches (1953).
17. *Tax Treatment of Foreigners*	
Japanese taxes to be applied to all foreign nationals on all earnings in Japan.	Special treatment, 1950-55: Exemption for income not received in or brought into Japan. 50% exemption for those contributing to economic reconstruction (included all foreigners, 1950-52; restricted thereafter). Percentage exemption schedule revised (1955): 40% (1956), 30% (1957), . . . , zero (1961).
Withholding rate on interest and dividend payments to non-residents to be reduced to 10%.	Interest made tax free. Dividend income given 10% rate until 1957, 20% rate thereafter.

NOTE: Many of the above provisions also applicable to corporate income tax, either unchanged or with minor modifications.

APPENDIX TABLE B

PERSONAL INCOME TAX (ADMINISTRATIVE)

SHOUP RECOMMENDATION	JAPANESE LEGISLATION, 1949-56
1. *Source Collection System*	
To be revised so as to require use of prior year return as standard.	Carried out.
To be applied to farmers as well as workers, thru deductions from price of staple foods bought by Government.	Never carried out.
Withholding taxpayers to be informed of amounts withheld.	Carried out.
2. *Anonymous Accounts and Securities*	
Anonymity system to be abolished.	Never enacted into law. Carried out as Finance Ministry ordinance (1950); repealed (1951).
3. *Reassessment Procedures—"Blue Returns"*	
Exemption from reassessment to be allowed taxpapers submitting blue returns with adequate supporting evidence.	Carried out.
Use of "objective standards" in reassessment to be reduced whenever possible for business income when adequate records are kept.	Carried out.
Taxpayer to be given right to appeal reassessment to higher authorities than the reasssessing tax office.	Carried out.

APPENDIX TABLE B (*Continued*)

SHOUP RECOMMENDATION	JAPANESE LEGISLATION, 1949-56
Appellate procedure not to involve use of "citizens' committees."	Carried out.
4. *Penalties*	
Penalty for late filing to be imposed.	Carried out. (5% for first month, increasing thereafter).
Penalty for late payment to be reduced in cases of slight delay. Interest rates on delinquent taxes to be reduced to 12% for first year, 24% thereafter.	Carried out. (10.9% for delinquent taxes, plus further penalties up to 5% after notice sent).
5. *Tax Courts*	
To be set up eventually on specialized basis.	Never carried out.
6. *Record-Keeping Requirement*	
To be imposed on all business taxpayers with high incomes. (Submission of books and records, certified by a C.P.A.)	Never carried out.
7. *Goal or Quota System for Tax Offices*	
To be abolished.	Carried out.
8. *Tax Collective Bargaining*	
To be abolished.	Carried out.
9. *Training of Tax Officials*	
To be instituted in the form of specialized estabments for inservice training.	Being carried out slowly.

NOTE: Certain of the above administrative recommendations apply more generally than to personal income taxes alone.

APPENDIX TABLE C

CORPORATE INCOME TAXES (AND ASSET REVALUATION)

SHOUP RECOMMENDATION	JAPANESE LEGISLATION, 1949-56
1. *Revaluation Procedure*	
Land and depreciable assets to be revalued as of July 1, 1949.	Three revaluations carried out (1950, 1951, 1954); last revaluation made compulsory for corporate assets and depreciable assets.
The completion date for depreciable assets and urban land to be Sept. 1, 1950; that for farm land set ahead pending special study.	Farm land not to be revalued until sold.
2. *Revaluation Amount*	
Upper limits of revaluation amount to be set by price indexes and standard depreciation practices.	Carried out. Lower limit equal to 80% of upper limit included in 1954 revaluation in some categories.
Revaluation amount to be minimum assessment for local property tax.	Carried out. Exceptions made in 1954 revaluation.
3. *Use of Revaluation Gain*	
To be entered as "special capital" among balance sheet liabilities. No distribution as dividend to be permitted for five years. Not to be basis of stock issues for five years.	First revaluation (1950): Capitalizable after Jan. 1, 1953, but only ¾ of gain capitalizable unless revaluation tax paid. Only 90% of appreciated value recoverable through annual depreciation. Second revaluation (1951): Same as 1950 revaluation, but capitalization date made July 1, 1951. Third revaluation (1954): Capitalizable immediately and completely. "Special capital" available for all purposes. Corporations not capitalizing at least 30% of gain

APPENDIX TABLE C (*Continued*)

Shoup Recommendation	Japanese Legislation, 1949-56
	may not declare dividends in excess of 15% of par value of stock.
4. *Tax on Revaluation Gain*	
To be set at 6% of gain. Payable in installments over 3 years for depreciable assets. Payable for nondepreciable property at time of sale.	Carried out, with provisions holding tax below gains on corporate income tax. Repealed in connection with 1954 revaluation.
5. *Corporate Income Tax Rate*	
Not to be increased above 35%. No progression to be imposed.	Carried out. Raised to 42% (1952): lowered to 35% on first 500,000 yen of income, 40% on the remainder (1955).
6. *Treatment of Accumulated Surplus*	
Special tax of 1% per year to be levied on aggregate earned reserves after July 1, 1949, with 9% maximum for family corporations.	Carried out, at rates of 2% and 7% respectively. Repealed except for family corporations; rate lowered to 5% for these (1951). Reserves made taxable only once, at time of creation (1954).
7. *Treatment of Inventories*	
System of reducing value 5-10% per annum (reserve for deterioration and price fluctuation) as business expense to be repealed.	Carried out. Price fluctuation reserves permitted (1952); former system practically restored (1954).
Inventory profits tax (levied on occasion of official price changes) to be repealed.	Carried out. All inventory profits taxation abolished (1951).
10. *Excess Profits Tax*	
To be repealed.	Carried out.
11. *Tax-Exempt Corporations*	
Authority to exempt from corporate taxation to be centralized in Finance Ministry.	Never carried out. All income-producing corporations made taxable, but rate for special corporations left at 35% when general rate was raised to 42% (1952); lowered to 30% (1955).
12. *Withholding Tax on Dividends*	
To be repealed.	Carried out. Former system restored (1952), with 25% of dividend income as tax credit.
13. *Inter-Corporate Dividends*	
To be excluded from income of recipient corporation.	Carried out.
14. *Family Corporations*	
Concept to be broadened to include several families. (If controling interest exercised by few family groups within 3rd degree of relationship, corporation to be treated as family corporation subject to special taxation.)	Carried out. Definition returned to single-family basis (1954).
15. *Liquidation Tax*	
To be repealed.	Carried out. Former tax re-enacted (1953).
16. *Loss Carry-Over*	
To be increased from one to five years.	Carried out for blue return corporations.
17. *Inventory and Depreciation Accounting*	
All approved methods to be permitted.	Carried out.
18. *Bad Debt Reserves*	
To be authorized as business expenses.	Carried out for blue return corporations.
19. *Entertainment Expenses*	
Problem not considered.	Tax deductibility limited (1953); further limitations imposed (1956).

APPENDIX TABLE D

Other National Direct Taxes

Shoup Recommendation	Japanese Legislation, 1949-56
1. *Net Worth Tax*	
To be imposed on net worth above 5 million yen at graduated rates up to 3%.	Carried out. Repealed (1953).
Succession Taxes	
2. *Accessions Principle*	
Separate estate and gift taxes to be replaced by single "accession tax" payable cumulatively by heir or donee.	Carried out. Cumulative feature repealed (1953). (Note: Inheritance tax remains in force.)
3. *Graduation by Relationship*	
Basis to be changed from closeness of relationship to probable lapse of time before next imposition of tax.	Carried out. Special exemption for elderly heirs repealed (1953).
Special exemptions allowed for minor children, spouses, and elderly heirs.	
4. *Exemptions*	
Recognized exemptions to be: 30,000 yen bequests and gifts from one individual in one year, plus basic life-time exemption of 150,000 yen from all sources.	Carried out. Increased (1953) to basic exemption of 500,000 yen for inheritance tax and annual exemption of 100,000 yen for gift tax.
5. *Credit for Frequent Transfers*	
System to be revised, to allow 10% of previous tax as credit for each year by which time between transfers falls short of 10 years.	Carried out.
6. *Charitable Transfers*	
Exemption to be denied bequests and gifts ostensibly charitable, in which donor, testator, heirs, or assigns retain interest.	Carried out.
7. *Rates*	
Top rates to be raised from 60 to 90%, bottom rates from 10 to 25%; middle rates to be substantially unchanged.	Carried out. Top and bottom rates subsequently reduced several times. Range (1955) is 15% to 70%.
8. *Social Security Taxes*	
Administration to be centralized in Finance Ministry.	Never carried out.
Single tax base to be adopted for all social security taxes.	Never carried out.
Social security tax collection to be integrated with withholding part of personal income tax.	Never carried out.

APPENDIX TABLE E

National Indirect Taxes

Shoup Recommendation	Japanese Legislation, 1949-56
1. *Alcoholic Beverage Excises*	
Rates to be raised to May 1949 level, with further increases as local liquor taxes are repealed.	Partially carried out. Rates subsequently changed several times, mainly in downward direction.
Liquor consumption tax to be repealed.	Carried out.

APPENDIX TABLE E (*Continued*)

Shoup Recommendation	Japanese Legislation, 1949-56
2. *Sugar Excises*	
Taxes on domestic sugar to be repealed.	Never carried out.
Duties on imported sugar not to be imposed.	Former system re-established completely (1950).
3. *Textile Consumption Tax*	
To be repealed.	Carried out.
4. *Tobacco Taxes* (Monopoly profits)	
Prices of cheapest (rationed) cigarettes and cut tobacco to be reduced.	Never carried out. Tobacco prices increased by local tobacco consumption excises (1954).
5. *Transactions (Turnover) Tax*	
To be repealed as soon as revenues permit.	Repealed as of Jan. 1, 1950.
6. *Commodity Taxes*	
Rates to be reduced:	Substantially carried out.
Group A (jewelry, etc.): 100% to 70%	Subsequent reductions lowered top rate to 50% (1955).
Group B (cameras, etc.): 80% to 60%	
Taxes on items used chiefly in business to be repealed.	Substantially carried out.
Taxes on footwear to be repealed.	Carried out.
7. *Minor Excises*	
Excises to be repealed:	
Soft Drinks	Never carried out. Soft drinks included in items subject to commodity tax.
Stock transfers	Carried out. Restored as substitute for capital gains taxation on securities (1953).
Travelling (on 3rd class travel)	Carried out.
Registration and Stamp Taxes	Never carried out.

APPENDIX TABLE F

INTER-GOVERNMENTAL FISCAL RELATIONS

Shoup Recommendation	Japanese Legislation, 1949-56
1. *Importance of Local Taxes*	
To be increased by 40 billion yen, relative to national taxes.	Partially carried out:

Fiscal Year	Million Yen		Percentage	
	Natl.	Local	Natl.	Local
1940	4,219	784	84.3	15.7
1950	570,849	188,281	75.1	24.9
1954	915,568	353,191	72.2	27.8

Source: Local Autonomy Agency, *Chibo-Zei no Genjo-Bunseki* (*Up-to-date Analysis of Local Taxation*) (Tokyo, 1955), p. 52.

Shoup Recommendation	Japanese Legislation, 1949-56
2. *National Subsidy of Local Activities*	
Methods to be changed:	
100% subsidies to be replaced by National Government performance.	Partially carried out. (In some cases, subsidy reduced instead.)
Partial subsidies to be replaced by Equalization Grant (except for promotional purposes.)	Never carried out.

APPENDIX TABLE F (*Continued*)

Shoup Recommendation	Japanese Legislation, 1949-56
3. *Equalization Grant*	
To be established as replacement for shared taxes and partial subsidies, but approximately double total amount of former.	Carried out. Equalization Grant system abolished (1954).
Distribution among local units to be based on algebraic formulae involving revenues and needs for major activities.	Carried out for 90% of grants (1951-54). Formula plan still used for distribution of shared taxes by Local Autonomy Agency.
4. *Elimination of Shared Taxes*	
Distribution element of income tax to be eliminated.	Carried out. 20% of income, corporation, and liquor taxes distributed to Local Autonomy Agency, (1954). Percentage raised to 22 (1955).
Inhabitants' tax and property tax to be entirely municipal.	Carried out. Modifications (1954-55): Approximately 1/3 of inhabitants' tax shifted to prefectures. Depreciable assets element of property tax may be allocated to other municipalities or to prefectures by Local Finance Commission.
Admissions, amusement, and enterprise taxes to be entirely prefectural.	Carried out. Modifications (1954-55): Admissions tax largely shifted to National Government, which turns back 100% of receipts.
System of municipal surtaxes on prefectural taxes to be ended.	Carried out. Partially replaced (1954-55) by prefectural shares in municipal taxes.
No mention of sharing tobacco tax receipts.	Since 1954, prefectures and municipalities may keep 5/115 and 10/115 respectively of tobacco sales within their borders.
5. *Local Debt Administration*	
Local debt limitations to be put on annual interest payments rather than principal amounts.	Never carried out.
Local debt securities to be sold to general public as well as Deposit Bureau of Finance Ministry.	Carried out for prefectures and larger cities.
Interest rates on local debt to be reduced.	Never carried out.
6. *Local Finance Commission*	
To be established independently of Local Autonomy Agency.	Carried out. Unified with Local Autonomy Agency (1952), and given advisory functions only.
Suggested functions: Dealing with local requests for nonauthorized taxes or especially high rates. Distributing funds available for borrowing among localities. Allocating such taxes among prefectures as value-added tax and income element in inhabitants' tax. Determining standards of need and taxable capacity under Equalization Grant.	

APPENDIX TABLE G

LOCAL TAXES

SHOUP RECOMMENDATION	JAPANESE LEGISLATION, 1949-56
INHABITANTS' TAX	
1. *Allocation*	
To be reserved for municipalities.	Carried out. Made partially prefectural (1954). See Table F, 4.
2. *Variable Element*	
To be based on income alone, not property or social status as formerly. Base may be (a) income tax (b) Taxable revenue, or (c) the difference, (b) – (a).	Carried out. National income tax used as standard. Takes form of 18% surtax with options for different treatment of fluctuating income.
3. *Per Capita Element*	
To be low, with fixed maxima varying with size of municipality.	Carried out. Further lowered to 100 yen in 1954 for all municipalities.
4. *Exemptions*	
Corporations to be exempted.	Carried out. Corporations made taxable (1951), tax taking form of 15% surtax on national corporate income tax. Surtax lowered to 12.5% (1952).
Only income recipients to be considered inhabitants, except for wives earning income included in joint return.	Carried out for variable element. All adults with income available pay per capita element.
Exemption to be given unemployed persons receiving relief.	Other exempted classes: Disabled, widows, persons under 20 and over 65, provided prior year income is below 130,000 yen.
PROPERTY TAX	
5. *Allocation*	
To be reserved for municipalities.	Carried out. Made partially prefectural (1954). See Table F. 4.
6. *Coverage*	
To be extended to depreciable assets as well as real property, but not to inventories.	Carried out.
7. *Assessment*	
To be based on capital rather than on rental values of property.	Carried out, with capital values determined by selling prices and volume of business. Rate originally set at 1.6% of base, subsequently lowered twice. In 1955, 1.4%.
8. *Relation to Asset Revaluation*	
Revalued amounts to be minimum assessments for property taxes on both land and depreciable assets.	Carried out. Not applied to 1954 revaluation. See Table C, 2.

APPENDIX TABLE G (*Continued*)

Shoup Recommendation	Japanese Legislation, 1949-56
In the case of farm land, official land prices to be multiplied by appropriate "adjustment factors" in each prefecture (not to exceed 2.5).	Assessments kept on rental basis: 900 times rental value (1080 times rental value of paddy). Attempted shift to "true market values" (1951) led to wide variation among prefectures. Since 1952, asessments on crop value basis, set for each prefecture by Local Autonomy Agency.
9. *Enterprise Tax—Value-Added Tax*	
To become exclusively prefectural.	Carried out.
Base to be extended to include payments to factors of production, i.e., enterprise tax to become value-added sales tax.	Never carried out. Effective date postponed annually through 1953; tax repealed (1954). Enterprise tax remains in effect, with exemption of 120,000 yen.
10. *Admissions Tax*	
To become exclusively prefectural.	Carried out. Tax made national, with collections returned to prefectures (1954). See Table F, 4.
Rates to be cut from 150% to 100%; charitable, amateur, scholastic events to be exempt.	Carried out. Rate reduced to 50% (1953), then put on sliding scale (1954): 10% (admissions less than 50 yen) to 50% (admissions 150 yen or more). Lowest rate applies to charitable, amateur, and scholastic events.
11. *Amusement, Eating, and Drinking Tax*	
To become exclusively prefectural.	Carried out. Rates halved (1953), except for geisha fees.
12. *Minor Taxes*	
Real estate transfer tax to be repealed.	Carried out. Restored as prefectural tax (1954) at 3% rate. Had formerly been prefectural, with municipal surtax, and at 20% rate.
Liquor consumption tax to be repealed.	Carried out.
Local "non-legalized taxes" to be repealed.	Mainly but not completely carried out.
13. *Voluntary Contributions (Kifukin)*	
Amount to fall to 10 billion yen within a year. (From 40-50 billion yen estimate for 1949-50).	Partially carried out.
Eventually to be eliminated.	No satisfactory data. Amount of *kifukin* estimated at 24 billion yen for 1953. See Saburo Shiomi and Hideo Matsukuma, *Zeimu Tokuhon (Reader in Taxation)* (Tokyo: Toyo Keizai Shimpo, 1955), p. 93.

SOME OBSERVATIONS ON THE REPORTS OF THE ROYAL COMMISSION ON THE TAXATION OF PROFITS AND INCOME

ALAN T. PEACOCK *

I.

THE Royal Commission on the Taxation of Profits and Income was appointed in January 1951, and it is worth quoting its terms of reference in full:

> " to inquire into the present system of taxation of profits and income, including its incidence and effects, with particular reference to the taxation of business profits and the taxation of salaries and wages; to consider whether for the purposes of the national economy the present system is the best way of raising the required revenue from the taxation of profits and income, due regard being paid to the points of view of the taxpayer and of the Exchequer; to consider the present system of personal allowances, reliefs and rates of tax as a means of distributing the tax burden fairly among the individual members of the community; and to make recommendations consistent with maintaining the same total yield of the existing duties in relation to the national income." [1]

The Commission reported in June, 1955. In four and a half years it held 97 meetings, 21 of them devoted to oral hearings, it received evidence from 400 individuals and representative bodies and issued three reports, of which the Second and the Final Report are discussed in the article.[2]

Its 14 members, headed first of all by Lord Cohen and later by Lord Radcliffe, both eminent judges, included experts in the law and accounting, and a financial expert, three economists, and representatives of both sides of industry. Such a mixed body could hardly be expected to reach complete agreement on matters of principle, and the Memorandum of Dissent to some of the main conclusions of the Final Report by the two trade union members and Mr. Nicholas Kaldor deserves particular notice. Occasionally in the Final Report it is possible to detect an uneasy compromise, and in the case of the problem of the taxation of overseas profits (Chapter 24), the Commission have had to merely state the differing viewpoints, leaving the reader to associate names with arguments. Nevertheless, there is no doubt that this document,

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[1] Final Report, Command Paper No. 9474 (1955), p. 1. These terms of reference were subsequently modified in March 1952 by the following significant addition: " to make recommendations bearing in mind that in the present financial situation it may be necessary to maintain the revenue from profits and income; and, in so far as they make recommendations which would on balance entail a substantial loss of revenue, to indicate an order of priority in which such recommendations should be taken into consideration."

[2] The full list of individuals and representative bodies in Appendix I. of the report makes intriguing reading. Apart from obvious professional experts and industrial pressure groups, the list includes the Amusement Rides Association, the Institute of Biology and the Ringwood Grammar School Parents' Association.

like the Report of the Royal Commission on Income Tax, 1920, will have great authority, and already some of its specific proposals have found their way into the Statute Book.

It is impossible to provide a complete summary of the Commission's findings in one article.[3] Also, the work of the Commission has already excited some excellent discussion.[4] Here we shall concentrate on some points which it is believed will be of particular interest to the American reader, such as the views of the Commission on progressive taxation, the taxation of capital gains, the methods of taxing profits, the calculation of depreciation allowances, and so on.

Before dealing with these points, it may be useful to provide the reader with a few fundamental facts about the British system of income and profits taxation as the Commission found it in 1951 when they began their deliberations.

II.

There is no general definition of income for tax purposes in British legislation but, with the major exception of imputed rent of an owner-occupied house, no income is taken to arise unless an actual receipt has taken place. The income tax is not confined to persons; the income of unincorporated societies, e.g. building societies, and of corporations is taxable. It is a progressive tax, the degree of progression[5] depending on the flat-rate personal allowance for all taxpayers which provides an exemption limit, and by the existence of a graduated surtax for incomes above £2,000 per annum. The usual distinction between the income receiving and income enjoying unit is recognized in the provision of marriage and family allowances at flat rates,[6] and there is an important differentiation between earned and "unearned" investment income, the allowance until this year being two-ninths of earned income up to a maximum of £450. While the income tax dates back to 1803 and surtax to 1907, the present profits tax is a recent innovation. At the end of the Second World War it was promised that the wartime Excess Profits Tax (E.P.T) would be discontinued. However, its removal promised a large fall in revenue, and so it was decided to replace E.P.T. with a profits tax levied on all corporations with profits to over £2,000 per annum but to afford special relief to undistributed profits. Although the rates of tax have been altered from time to time, the structure of the tax has remained of this form.

While the essential principles of income taxation have remained unaltered, the environment in which they operate has changed enormously. In 1938, central government current expenditure was 22 per cent of gross national product at factor cost, and 32 per cent in 1951 when the Commission first met.

[3] A useful summary of the report is published by the Federation of British Industries—"*The Taxation of Profits and Income:*" *A digest of the Reports of the Royal Commission*, October 1955.

[4] See, for example, F. A. Cockfield, "Report of the Royal Commission on the Taxation of Profits and Income, a Commentary", *National Provincial Bank Review*, November 1955. P. P. Streeten, "Some Problems raised by the Report of the Royal Commission on the Taxation of Profits and Income", *Oxford Bulletin of Statistics*, November 1955. A. R. Prest, "The Royal Commission on the Taxation of Profits and Income", *Economica*, November 1956. David Walker, "The Royal Commission and Depreciation Allowances", *Accounting Research*, October 1955.

[5] For an analysis of progression in the British tax system, see, Makiko Kubo "Income Tax Progression in the United Kingdom", *Public Finance*, No. 2, 1955.

[6] See, however, the recent changes in family allowances mentioned in footnote (8) below.

The yield of income tax and surtax in 1938 was 38 per cent of central government revenue; in 1951 it was over four times as large and 42 per cent of total revenue. In 1938, 5½ per cent of personal incomes was paid over in income tax and surtax compared with almost exactly 10 per cent in 1951.

One of the major results of this transformation in our tax structure, which brought about the institution of the Commission, was the fact that the relative position of the different categories of taxpayer was greatly altered by the war. The war brought in its train a considerable increase in money incomes and a faster rate of increase in prices, but tax allowances were not adjusted upwards in order to take account of changes in the value of money; indeed some allowances were cut during the war. The surtax exemption limit remained rigidly fixed at £2,000 per annum where it had been since 1918. The surtax has therefore ceased to be an impost solely on the rich and has become uncomfortably familiar to the moderately well-off. Although personal allowances have been increased since the war and the standard rate of tax reduced from 10sh. in the pound to 8sh.6d., the real tax burden has increased because inflation has pushed large numbers of people into higher income brackets subject to higher rates of tax.[7] Not only has the relative burden of the income tax on higher income brackets become greater but the relative burden of those with dependents has increased, although some important adjustments in allowances were made in this year's budget. The Royal Commission itself pointed to the fact that piecemeal alteration in allowances over the years had produced a situation where the allowance made for differing family circumstances becomes proportionately smaller as income increases.[8]

The fiscal morality of the British taxpayer has always been a subject of wonder to Continental observers, but the strain on conscience produced by the increased burden of income tax and surtax has been manifested in the attention paid by individuals and businesses in recent years to legal avoidance, which is encouraged by the lack of precise definition of the term income. There has been ample incentive to seek returns in the form of capital profits, which are not subject to tax, rather than in the form of investment income, and to bombard the Chancellor of the Exchequer with requests for special concessions in respect of deductible expenses. Inevitably this situation has revealed important anomalies in tax treatment, and scrutiny of much of the evidence presented shows that interested parties were quick to point out cases where a principle applied in one case did not apply in their own. Moreover, the opportunities for tax avoidance are not equalized, particularly in the case of earnings received in employment (Schedule E of the income tax) and those received in respect of professional earnings (Schedule D). This is the

[7] For the statistical evidence for this statement, see F. W. Paish, "The Real Incidence of Personal Taxation", *Lloyds Bank Review*, January 1957.

[8] It is not proposed to examine the recommendations of the Commission in respect of personal and other allowances in detail. They recommended that, within limits, the child allowance should be proportional to income, and that the upper limit of earned income relief should be extended, at a reduced rate, into the surtax range. Mr. Thorneycroft's budget of this year accepted in principle the view that middle-class incomes should be afforded some relief. The child allowance, however, is to be graduated according to age, while earned income relief is now to be extended up to £10,000 per annum, much further above the surtax level than the Commission itself had suggested.

favourite example of university professors who, in their academic capacity have had no end of trouble trying to obtain a book allowance under Schedule E, but who in their capacity as part-time authors, broadcasters or consultants taxed under Schedule D have been known to have a claim allowed for their daily papers.

Finally, a word might be said about the chequered history of profits taxation since 1947. There is no need to do more than to hint at the problems which arise in defining a " corporation " for the purpose of profits tax or in deciding what is the most equitable way of allowing deductions in respect of fixed capital investment and inventories. These problems have been just as much in the foreground as they have been in the United States, and were a major concern of the Commission. What has elicited considerable comment has been the effects of profits taxation on the structure of business, through its discouragement to the distribution of profits.[9]

III.

In respect of the income tax, it is proposed to concentrate on two major questions considered by the Commission—the defence of progressive taxation found in the Second Report and their rejection of capital gains taxation in the Final Report.

The defence of the progressive principle (like Lord Beveridge's defence of the insurance principle in social security) rests solely on its popularity. According to the Commission this principle best conforms to our " sense of fairness " in these matters, and supports this principle with the appropriate quotation from Book V. Chapter II of the *Wealth of Nations.* The Commission recognizes, of course, that mere acceptance of this principle does nothing to promote agreement about the *degree* of progression, which must be dependent upon one's particular view of equity.[10]

There are two criticisms of this approach. While the Commission is obviously entitled to propose its own view on equity or to support a particular view, it does nothing to elucidate it. In the long discussion over questions of " just " taxation, it was accepted, although not always explicitly, that any principle applied to the whole system of taxation and not to a part of it, or at least to those taxes which represented the finance of indivisible services. Even then, this approach might very well be extended to cover consideration of negative taxes, e.g. social payments.[11] Moreover, many supporters of progressive taxation of the most radical kind, for example Edgeworth, assumed that government expenditure was a relatively small proportion of the national income. The Commission fails to consider the relationship of the income tax to the rest of the tax structure. They were

[9] For an interesting account of these effects, see Sir Arnold Plant, " The Substance and the Shadow: Reflections on Prosperity ". (Third Fawley Foundation Lecture, University of Southampton, 1956), pp. 14-17. But see also the " Memorandum of Dissent to the Royal Commission ", Chapter III for a defence of non-distribution relief. We shall subsequently abbreviate its title to M.o.D.

[10] See the Second Report, Command Paper No. 9105 (1954), pp. 31-34.

[11] It should be noted that Professor Hicks, who it must be presumed, accepts the progressive principle, does not accept, however, the majority view about exemption limits, and therefore about the degree of progression. Before deciding on exemption limits he maintains that we must look at " the whole *net* tax position of the small income receiver, which comprises not only his income tax (if any), but also the indirect taxes he pays, the contribution to social insurance which he pays, and the benefits which he receives from the whole system of social security. . . ." (See his *Reservation* to the Second Report, p. 90).

presumably precluded by their terms of reference from passing judgment on the sheer weight of tax implied by present-day expenditure levels,[12] but this does not exonerate them from the charge of claiming support from earlier writers who had very different circumstances in mind.

The second criticism is of a different order. Granted that equity demands progression and even determines within broad limits the degree of progression, it is surely necessary to state precisely how much weight is to be given to equity (in this narrow sense) as distinct from other considerations of policy. If the popular view is accepted, this is not to say that it is necessarily a consistent one. Here the Commission offers little help beyond a few isolated remarks; probably the heterogeneity of its composition precluded unanimity about policy aims which would have made such a procedure possible. However, one interesting consequence of progression, the effect on the incentives to work, was investigated by the Commission. The Commission considered and rejected three separate schemes for the merging of income tax and social security which proposed a proportional income tax in place of the existing income tax and national insurance contributions. One of the claims made for these schemes was that the disincentive effects of high marginal tax rates would be avoided.[13] The Commission instituted a special enquiry carried out by the Social Survey, the detailed results of which were published as Appendix I of the Second Report. This report claims that the marginal rate of tax has no significant effect on the behaviour of wage-earners and that few wage-earners know enough about their tax liabilities to take them into account in their behaviour.[14]

This reluctance to enunciate general principles and to consider how far existing arrangements conform to or conflict with them is a general characteristic of the Report which we shall come across again.[15] It is nowhere better demonstrated than in The Report's discussion of the tax treatment of capital gains.

We have already noted in passing that postwar inflation encouraged investment in forms which would yield untaxed capital gains rather than a high return which would attract surtax. This form of avoidance has been attacked, firstly, because the opportunity to make these gains is limited to those with capital assets and, secondly, because it is generally believed that they provide means for luxury spending and thus add to inflationary pressure. One could make a strong case for the argument that this is the popular view of the matter and that for this reason the community's " sense of fairness " might well support the extension of income tax to capital gains. However, the Commission does not feel disposed to apply the same

12 It is possible to detect a hint of criticism of the weight of taxation in paragraph 21, p. 5 of the Final Report.

13 See, Second Report, Chapter 2, and Minutes of Evidence, Days 1, 2, and 3, for the specific proposals of Lady Rhys-Williams, Messrs. Haynes and Kirton and the Liberal Party.

14 The Commission confined itself to wage-earners. Little empirical investigation has been conducted into the behaviour of professional persons, but mention should be made of the interesting study of a sample of British accountants and solicitors made by Professor G. F. Break which concludes: " Whatever may be the important causes behind Britain's post war economic difficulties, a lack of incentive to work because of high income taxation does not appear to be one of them." See G. F. Break, " The Effects of Taxation on Incentives ", *British Tax Review*, June 1957.

15 This criticism has been made by several writers. See particularly, F. A. Cockfield, *op. cit., passim* and A. R. Prest, *op. cit.*, p. 373.

criterion to capital gains as it applies to the problem of tax progression! Indeed, it even disputes the fact that capital gains are likely to be spent, although no evidence is offered by it or by the writers of the M.o.D.[16] who support the "popular" view. The Commission has invoked another tradition to support its position, namely that taxable income in Britain has always meant actual receipts of money or money's worth. "To define income in this way is to define it for the purposes of a workable system of tax collection . . . . . we conclude, therefore, that the income tax system has followed the right, because the only practicable, course in excluding unrealised appreciation in value from the computation of income and that the taxation of capital gains must be considered in relation to realised gains, if it is to be considered as a viable measure at all".[17] The Commission finds it easy to prove that any taxation of realised gains would involve complicated provisions to deal with loss offsets, exemptions, the attribution of capital gains to particular fiscal years, and it appeals to U.S. experience in these matters.

Two final arguments are advanced in order to dismiss capital gains taxation. The first argument is a rather curious one. Generally, the problems associated with the taxation of realised gains are dealt with by taxing these gains at a fixed rate, as, indeed, the M.o.D. recommends, but the Commission argues that because those favouring a capital gains tax do not want to see gains taxed at the full rate of a combined income tax and surtax, then they should not be taxed at all.[18] As Mr. Cockfield points out, this is an astounding argument from a Commission which has already accepted [19] discrimination in favour of earned incomes and elsewhere recommends abatement of tax on fluctuating incomes and payments derived from superannuation schemes. One is bound to agree with the minority view that there is "no principle of equity which leads us to suppose that if something cannot or should not be taxed at 95 per cent it should be taxed at zero per cent." [20]

The Commission's final objection has more substance. The yield of the tax would be highly variable, difficult to forecast, and low, and against this low yield must be set the implied loss in estate duty. The Inland Revenue in a highly interesting Annexe to the Final Report calculate that the yield of such a tax would be unlikely to average more than £50 million a year and might vary between + £250 million and – £250 million, although a revised estimate puts the yield somewhat higher than this. The Minority, however, put the yield at somewhere between £200 million and £350 million a year, a figure which, if accurate, would promise substantial relief elsewhere in the tax system. However, it seems fair to say that this esti-

16 "It seems to us much better to assume that, on the whole, capital gains will be saved. Certainly it is the sensible thing that they should be; and we do not see much evidence that this presumption of reasonable conduct fails to correspond, in the main, with the facts." (Final Report, paragraph 106, p. 37). But Cf. M.o.D. p. 374, footnote 2.

17 Final Report, paragraph 83, p. 26.

18 "Whatever form is proposed for such qualifications and exemptions, their introduction seems to us to show up a central weakness in the arguments for taxing capital gains as income; if such a gain is fairly regarded as income, the recipient might be taxed on it at the full progressive rate, but, on the other hand, if it cannot fairly be so regarded, there is no good reason why his capacity to pay income tax or surtax should be thought to be increased by its receipt." (Final Report, para. 99, p. 33).

19 F. A. Cockfield, *op. cit.*, pp. 15-16.

20 M.o.D., paragraph 62, p. 374.

mate is very optimistic.[21]

The practical conclusions of the Commission concerning capital gains taxation are unexceptional, but their method of arriving at their conclusions does not inspire confidence in their arguments. The extensive discussion of the definition of income for tax purposes in the Minority Report, while it may not appear to be original to American readers familiar with the work of Fisher, Simon, and Vickrey, offers a much clearer guide to principles of taxation. On the other hand, the M.o.D. certainly underestimates the administrative problem of capital gains taxation, and its writers are forced to admit that too high rates of tax would have " undesirable effects on risk-bearing and, saving and capital formation." [22]

IV.

The basic issue in profits taxation is whether companies should be taxed as separate entities. There is no need to discuss in detail in this journal the many arguments advanced for and against a corporation tax *per se*,[23] but it ought to be pointed out that the issues have never been so thoroughly discussed in Great Britain as in the United States, and are certainly made no clearer by the discussion in the Royal Commission's Report. The Commission argues that separate taxation of corporations as legal entities is neither practicable nor desirable, and recommends a modification of the existing double-tier system by which companies would be subject to income tax recoverable from shareholders as recipients of dividends and to a flat-rate tax on total profits. This conclusion, in my opinion, embodies a false conception of the effects of the single-tier system, and the suggested modification of the existing system of profits taxation does not apply the principles which the Commission wishes to implement.

One can appreciate the practical difficulties of the single-tier system listed by the Report, although it is not clear that these would be any more troublesome than those of the modified system. One could appreciate a reasoned statement of the case for not regarding the corporation as a separate legal entity and for labelling a profits tax as a form of double taxation on shareholders. The Commission is content to state that " we accept the criticism that it is double taxation to treat a company dividend as being a wholly new source of income " [24] without reporting the substance of the criticism.

It was within the terms of reference of the Commission to enquire into the incidence of profits taxation, and it is here that a technical analysis of incidence is most needed, for, obviously, the double taxation argument rests on the assumption that profits tax is borne by shareholders and not by consumers through higher prices. The Commission neither mentions this necessary assumption nor considers the evidence submitted

[21] For a short statistical analysis of the M.o.D.'s figures see A. R. Prest, *op. cit.*, p. 369.

[22] See M.o.D., paragraph 61, p. 374. This admission is difficult to square with their contention in the same paragraph that capital gains are largely spent. Although it is not entirely clear, it seems that the Minority would argue that if capital appreciation of this sort did not arise, then there would be a temptation in inflationary conditions to spend out of capital. Thus a high capital gains tax combined with tax exemption on spending out of capital would encourage dissipation of capital.

[23] For an admirable summary and discussion of them, see R. Goode, *Corporation Income Tax*, Chapters 2 and 3.

[24] Final Report, paragraph 544, p. 161.

which supported a different conclusion.[25] The M.o.D. is much more convincing in its statement of the case for separate company taxation,[26] and the Note of Reservation by Mr. Crick supported by Mrs. Anstey makes the further point that separate taxation of corporate profits would promote a more flexible fiscal policy.[27]

However, granted the Commission's case that a single-tier profits tax discriminates against investment income, then equity would appear to demand that shareholders should pay income tax on dividends and, in view of the impracticability of imputing a share of undistributed profits to individual shareholders, a separate tax on undistributed profits should be devised. The Commission seems to recognize this as an argument of equity, but then has cold feet. Equity gives way to expediency: "We have disclaimed the idea that there is an inherent economic vice in the process of distribution, but we should be very sorry to go to the other extreme or to suggest that at a time like the present the tax code should even give the appearance of discouraging a liberal reservation of company profits." [28] But it is not at all clear that, "at a time like the present", distribution should be discouraged. The Commission has in mind the effect on aggregate savings of distribution, but it is a moot point whether or not net saving would be diminished by distribution. In any case would it not be more advantageous for the economy as a whole if less encouragement were given to the retention of profits in business where they are earned, so that competition for capital would be more effective? At least these points require mention if only to be refuted.

It would only be fair to mention that the Commission devotes a good deal of space to some important technical issues regarding the taxation of public corporations and public utilities, mining concerns and overseas profits, and sheds a good deal of light on some of the knotty problems encountered in existing tax practice. However, space prevents commentary on these issues.[29]

V.

Discussion of the tax treatment of replacement of machinery and plant has been stimulated in Great Britain, as in many other countries, by continuous inflation since the war. The fundamental issue of equity is clear: Have firms subject to income and profits taxes any prescriptive right which should allow them exemption in order to be able to replace capital when other taxpayers are not so favoured? The Royal Commission, following the Tucker Committee [30] who had reported earlier on this question answered, "No." Nor would it accept some of the other reasons commonly advanced in favour of replacement cost depreciation, that it would prevent the "erosion of capi-

[25] For a summary and discussion of this evidence see P. Streeten, *op. cit.*, pp. 319-26.

[26] See M.o.D., paragraph 86, 87 and 90.

[27] See Reservation to Chapters 2, 20 and 24 by W. F. Crick, Final Report, pp. 345-47.

[28] Final Report, paragraph 551, p. 163.

[29] Their recommendation for the lightening of the burden of income and profits taxation on overseas corporations was accepted in principle by the Chancellor of the Exchequer this year. It must be pointed out, however, that the Commission's recommendations are by no means accepted by all professional opinion. See, for example, M.o.D., paragraphs 174-77, pp. 408-09, and P. Streeten, "The Taxation of Overseas Profits" (*Manchester School*, January 1957).

[30] Committee on the Taxation of Trading Profits. Command Paper No. 8189 (1951).

tal " [31] during a period of inflation and would bring into play an important anti-cyclical force.[32] In rejecting replacement cost depreciation for tax purposes the Commission went against a strong body of business and academic opinion. There is no doubt that it makes a good case, even although it treats some of the opposition arguments with less respect than they deserve. The Commission favoured the retention of historic cost depreciation and the existing system of initial allowances, varied from time to time according to the prevailing economic situation.

Obviously the case in terms of equity is a doubtful one, the only main justification for discriminatory treatment for businesses being that businesses are subject to risks which do not affect other taxpayers; but as Mr. Streeten points out,[33] this is hardly a specific argument for replacement cost depreciation.

The " erosion of capital " argument just referred to was put forward by the Federation of British Industries and was based on the study of the fixed assets of 80 companies as at 1938 and as at 1949 in terms of 1949 prices. The conclusion drawn was that, while fixed assets had increased in volume slightly, this increase was only made possible by going to the market for funds, which, apparently, is undesirable.[34] The Commission was not satisfied with the statistical evidence, and their own enquiries conducted through the Inland Revenue appear to be confirmed by more recent studies of company profits.[35]

The argument that historic cost depreciation intensifies cyclical fluctuations is one which still commands the support of some business cycle theorists.[36] It is too familiar to require a detailed exposition here; sufficient to say that those who supported the argument before the Royal Commisison argued that historic cost depreciation inflated gross profits and that this " historic cost error " encourages optimistic expectations, causing businessmen to make larger distributions of profits and to seek means of increasing investment.

Before examining this argument in detail, it is necessary to consider this brief description of business behaviour. It assumes that, while the Inland Revenue accepts historic cost depreciation and requires such calculations to be made, businessmen make no extra allowance for depreciation. There is evidence that some major concerns in Britain adopt something approaching replacement cost depreciation for their own decision making.[37] The Commis-

[31] A phrase used by the Federation of British Industries to denote a situation where capital cannot be " maintained intact ". See Document 124, *The Effect of Inflation on Industrial Capital Resources.*

[32] See, for instance, the Memorandum, submitted by F. W. Paish, Document 191, paragraph 20. Another interesting feature of this document is the scheme for the revalorisation of assets for tax purposes.

[33] P. Streeten, article cited in footnote I., 330-31. See also E. Cary Brown, *Depreciation Adjustments for Price Changes,* Chapter IV. Part of Professor Brown's arguments were summarised for the Commission as part of the written evidence. See Document 271 of the unpublished evidence.

[34] See, Final Report, paragraph 332 and Published Minutes of Evidence, Day 17.

[35] See, for instance, F. W. Paish, " Company Profits and their Distribution since the War ", *District Bank Review,* June, 1955. Professor Paish shows that the combined total of annual depreciation allowances and initial and investment allowances exceeds the estimated depreciation at replacement cost in each year from 1948 to 1952.

[36] To quote only British literature on the subject, see K. Lacey, *Profit Measurement and Price Changes* (1952) and W. T. Baxter, " The Accountant's Contribution to the Trade Cycle " *Economica,* May 1955, pp. 99-112.

[37] On this point, see A. R. Prest, " Replacement Cost Depreciation ", *Accounting Research,* July 1950, an article submitted as evidence to the Royal Commission.

sion follows up this caveat with another. It could equally well be argued that historic cost depreciation is a stabilizing factor in a time of rising prices because " the tax claims combined with the heavy demands on the funds of business tend to reduce both investment and distributions ".[38] As there is so much disagreement about the facts, the only possible way to appraise these arguments is to consider hypothetical cases.

Let us choose the most favourable assumptions for the argument for replacement cost depreciation. This would require that with historic cost depreciation, any profits net of depreciation and taxes would be distributed, and with replacement cost depreciation, profits net of depreciation and (presumably) lower taxes than in the previous case would go to increase business savings. In order for historic cost depreciation to be more inflationary than replacement cost depreciation, it would be necessary to prove that net saving would be lower under such conditions, that is to say that the combined marginal propensities to save of shareholders, government and businesses weighted by the appropriate distributions would be lower than the combined weighted marginal propensities to save of businesses and government in the replacement cost case. So far as shareholders are concerned, it is usually merely asserted that they would spend more of or even any extra amount of dividends received on consumption than businesses would spend on extra investment out of the same amount if it were to remain undistributed. This is a doubtful proposition. Professor Paish in oral evidence makes the point that the extra taxes raised by government under a system of historic cost depreciation are much more likely to be spent than if they accrued to business as part of business savings. This would also mean that if replacement cost were introduced, aggregate saving could be maintained with lower levels of taxation, i.e. the loss of revenue need not necessarily imply an increase of tax burdens elsewhere.[39] We can accept this as an interesting hypothesis, but not as a proposition confirmed by experience.

Two further arguments used to emphasize the destabilizing effects of historic cost depreciation relate to possible side effects. The first of these is that the inflation of profits will give added impetus to the pressing of wage claims by trade unions. The second that high profits " convey a comfortable suggestion (to all save the most knowledgeable) of correspondingly high cash resources; and this is rational to the extent that high profits make banks more ready with loans." [40] Both these arguments suggest the question: What difference would it make if replacement cost depreciation were introduced? Trade unions in Great Britain would scarcely curb their wage demands because of a change in accounting procedure alone. Surely banks will scrutinize the reserve position of firms (which would, other things being equal, be strengthened by replacement cost accounting) and the trend as well as the absolute total of profits.

We must conclude, therefore, that the case for replacement cost accounting in order to promote stabilization policy is, in the words of the verdict of the Scottish courts, " not proven ", and so the general case is made no better in consequence. However, to reject the

[38] Final Report, paragraph 357, see also the evidence of Professor R. F. Kahn.

[39] See Oral evidence, Day 9.

[40] W. T. Baxter, *op. cit.*, p. 111.

claims of its supporters is not to infer that the supporters of historic cost accounting, particularly the professional accounting bodies, made a better case. Indeed, some of the arguments for the traditional method were positively obscurantist.[41]

The valuation of inventories for tax purposes provided the unusual situation of a disagreement between the Commission and the Inland Revenue. The Inland Revenue (and also the M.o.D.) took the view that the Fifo method of inventory valuation is the appropriate one for tax purposes. The disagreement was based on differing views of business practice. The M.o.D. argued that, the normal practice being that traders sell their earlier purchases of stock first, the Fifo method best corresponds to trading practice; the Commission on the other hand denies this, stating that " the chances are that in practice the more recent arrivals are the earlier drawn upon ".[42] The writer is compelled to agree with the M.o.D. that, while traders may sell their most recently acquired stock on occasions, " such cases are the incidental consequence of imperfect foresight, and not the peculiar properties of certain kinds of physical operations or of certain types of trading ".[43] It is extremely doubtful if traders are so irrational as the Commission appears to think they are. There is some sense, however, in the Commission's recommendation of a variety of possible methods of valuation with safeguards against switching from one method to another, even although their catholicity involves them in further inconsistencies. Why, for instance, support a variety of methods for inventory, including the Fifo method, yet insist on historic cost accounting for fixed assets?

VI.

It is difficult to avoid the general conclusion that the Royal Commission on the Taxation of Profits and Income will be remembered for its discussion on points of detail rather than for its treatment of matters of principle. In some respects, this was the inevitable conclusion of the restrictive nature of the terms of reference which rule out any general observations on the absolute burden of taxation. But like many previous Commissions on economic and financial matters, the opportunity given to specialists in many fields to submit written and oral evidence has produced a timely reconsideration of some neglected problems in public finance. So far as the professional economist is concerned it has resulted in a reorientation of his interests, which suggests that much more attention will be paid in future to the more traditional aspects of public finance. The next generation of economists will not be taught as if the problems of public finance were exhausted by the study of fiscal policy alone.

[41] Cf. for instance, the quotation from the memorandum of the Institute of Chartered Accountants in England and Wales, cited with approval by the Commission: " An important feature of the historic cost basis of preparing annual accounts is that it reduces to a minimum the extent to which accounts can be affected by the personal opinions of those responsible for them."

[42] Final Report, paragraph 452.

[43] M.o.D., paragraph 157, p. 402.

THE TAXATION OF UNREALIZED CAPITAL GAINS AND LOSSES: A STATISTICAL STUDY

WILBUR A. STEGER*

FOR many years now, a favorite proposal of public finance theorists for revising the tax treatment of transferred capital assets has been that of "constructive realization." Under this concept, the "transferor" of a capital asset by gift or death would become liable, at the time of the gift or death, for tax on any unrealized appreciation accumulated prior to transfer.[1] Another set of proposals, which can be labelled "accrual proposals," are similar to constructive realization in that they, also, ignore the physical act of realization as the basis for timing the tax accountability of capital gains and losses. Under one popular variant of this proposal, taxpayers would be required, at periodic intervals, to include in taxable income the net accrued gain or loss on capital assets earned during the period, regardless of whether or not realization had actually taken place.

These proposals primarily have been advanced as suggestions for decreasing the tax avoidance allegedly present under current tax law, which allows the tax postponement of capital appreciation until realization actually takes place. While it is true that these proposals for revision of the tax law usually have been associated with other equity-minded tax proposals, such as full inclusion in ordinary income of capital gains and losses and comprehensive income averaging, the proposals seeking to revise the realization criterion will be dissociated from other related tax proposals for the purpose of this study. By considering them independently,[2] it is hoped that a clearer conception of the economic effects of these proposals may be obtained.

It cannot be said that the possible economic effects of these proposals have been ignored in the literature. The theoretical effects on the markets for capital assets have been considered;[3] it has been argued in opposition to the proposal, for example, that tax motivated liquidations would increase or that the potential growth of small and growing corporations would be curtailed. Compliance and administration difficulties have been stressed, however, while the economic aspects usually have been given only cursory attention. One of the reasons for this, undoubtedly, is the absence of any statistical basis for judging the impact of these proposals. Data on unrealized gains and losses, the compon-

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1 Many proposals have been advanced for the treatment of accrued losses. They range from partial to full tax credits for any accrued losses contained in the transfer. For a review of these and other proposals, see U. S. Treasury Department, Tax Advisory Staff of the Secretary, *Federal Income Tax Treatment of Capital Gains and Losses*, 1951, pp. 74-76.

2 It is quite conceivable that an alteration in current realization criterion for tax purposes could be introduced with no other associated change in the tax law.

3 Tax Institute Panel Discussion, *Capital Gains Taxation* (1946); U. S. Treasury Department, *op. cit.*

ent most neded for such a study, simply have not been available in the past.

The objective of this study is to help fill this empirical gap in our knowledge of the workings of the tax system. Recently published data on the net worth and savings of the total population [4] are convertible into statistics of unrealized gains and losses. Given these, two general tax proposals are appraised: [5]

1. Constructive realizations of unrealized net capital gains at death.
2. Periodic accruals of unrealized net capital gains.

These two general proposals were chosen, in lieu of others which also would revise the present tax laws realization criterion, on the basis of administrative feasibility and general popularity among theorists. In each case, the change in the tax burden (on the individual and in the aggregate) imposed by the proposed tax revision is described. Some of the economic implications of these tax revisions are briefly analyzed at the conclusion of the paper.

Since the derivation of empirical information occupies a central place in this type of analysis, a description of data, methods of analysis and assumptions becomes highly important. In the interest of readability, however, this detailed discussion has been deferred to a later point. Findings and conclusions are discussed first, followed by a detailed discussion of the results of the statistical investigations and their implications.

[4] Goldsmith, R., *A Study of Saving in the United States*, Princeton University Press (Princeton, N. J., 1955).

[5] No implication concerning the constitutionality of these tax proposals is to be construed. Concerning this, however, see Surrey, S. S., "The Supreme Court and the Federal Income Tax Law," *Illinois Law Review*, March 1941, pp. 779-817.

Summary of Findings

The basic data of this paper do not include the period since 1950, during which substantial amounts of unrealized gains undoubtedly have accrued. However, the following results are believed to be applicable and relevant to current tax years.

1. Unrealized capital gains are much larger in the aggregate than realized capital gains. In 1949, for example, there was more than $250 billion of unrealized gains attached to individuals' holdings of real estate, common stock, and equity in unincorporated enterprises. Total realized capital gains reported prior to 1949 were only $31 billion.

2. If unrealized gains had been taxed at death, examination of 1949 estates indicates that the total taxes paid at death (i.e., new estate tax and capital gains taxes) would have increased by approximately 40 per cent above the old estate tax. Average unrealized gains in the 1949 estates would have been $65,000 approximately. The percentage increase in total taxes at death would have been greater for smaller estates and would have decreased rapidly as estates increased in size. Effective tax rates also would have increased to a greater degree for smaller estates.

3. If only taxable estates (those estates for which a federal estate tax return must be filed) were obliged to realize capital gains constructively at death, approximately 75 per cent of total unrealized net capital gains as of 1949 would have escaped taxation. To reach these gains, the unrealized gains of price-sensitive assets held outside of the estate tax population also would have to be taxed at the death of their owners. At a minimum, approximately 2.5 million units in this group would have had to

pay approximately $6,000 (on the average) in increased taxes at death, 1.4 million about $4,000, and another 20.0 million about $2,000.

4. Were the unrealized gains of all members of the population taxed, a substantial amount of unrealized gains (approximately 40 per cent of the unrealized gains occurring outside of the estate tax population) would accrue to lower income individuals (under $4,000 per year). Most of these gains would arise from real estate.

5. It is estimated that the proposal for constructive realization of gains at death would increase tax revenues by approximately $1.2 billion annually.

6. Were there periodic accruals (every ten years) of unrealized net capital gains, the average tax payment for any income or wealth group holding price-fluctuating assets rarely would exceed $3,000. Naturally, individual members of these groups might pay substantially more than this.

7. If gains were realized constructively at death, liquidity difficulties would appear primarily in estates of more than $300,000. Most of these estates would be forced to liquidate assets of less than the highest liquidity in order to pay the total taxes due at death. This would severely increase the problems of small and medium size businesses on the occurrence of the death of one of the owners.

Data and Methods

The statistical results of this investigation are based on estimates of the aggregate amounts of unrealized capital gains and losses in the United States as of 1949 and their distribution by type of capital asset. These estimates were made by subtracting from the total increases in personal net worth of the population over a stated period of time that part of this increase which was previously taxed as income, such as personal savings and realized capital gains of individuals.

The data showing the increase in individual net worth minus aggregate personal savings were obtained from R. Goldsmith's massive study of saving and wealth data.[6]

The Goldsmith data show that between 1901 and 1949 there was an increase of $1,030 billion in the combined net worth (savings, inheritance and gifts, net realized and unrealized capital gains and losses) of all individuals, corporations, and government. The increase in individuals' net worth minus the increase in aggregate personal savings shows that $357.4 billion of capital gains accrued to individuals over this period. After subtracting out the net realized gains and losses between 1923 and 1949[7] ($31 billion), the aggregate total of net unrealized gains of individuals over the 49-year period is found to be $325 billion. Unrealized gains by individuals, it appears, are perhaps more than 90 per cent of total (realized and unrealized) capital gains.

Of total gains, real estate has been the most important source of valuation gains for individuals, the difference between net worth changes in real estate and savings being $195 billion over the period. Corporate stock is next highest, contributing $57 billion of the net worth increase which is unexplained by annual savings. Equity changes in unincorporated enterprises were also very

[6] Goldsmith, *op. cit.*, Volume I, pp. 133-142, 180-226, 255-257, and 288-289.

[7] These were computed from Seltzer, L., *Nature and Tax Treatment of Capital Gains*, National Bureau of Economic Research (New York, 1951), Appendix.

large.[8] Together, these three types of assets provide more than 90 per cent of all the net worth increase unaccounted for by savings over this period. By subtracting the total capital gains and losses realized on each of these types of assets since the inception of the income tax from the increase in net worth (unexplained by saving) accruing on each type of asset since 1900 (for example, the $195 billion in real estate), the following conclusion is reached: as of 1949, *55 per cent (approximately $185 billion) of total real estate holdings of individuals represented unrealized capital gains, and 40 per cent (approximately $74 billion) of total common stock and equity in unincorporated enterprises holdings of individuals represented unrealized capital gains.*[9]

This statistical result is very important for the ensuing analysis. The percentages that unrealized gains are of total real estate (55 per cent) and equity holdings (40 per cent) are the basic statistics used to determine the extent to which taxes would increase if unrealized gains were realized constructively either at death or periodically during taxpayers' lifetimes.

[8] There was a $62.5 billion increase in the net worth of unincorporated enterprises over the period, approximately $38 billion of which was not attributable to savings.

[9] This conclusion is reached by, first, deducting realized capital gains and losses arising from the sale of real estate and equity interest in business from total gains associated with each type of asset. The only method of dividing total *realized* gains ($31 billion) into those arising from real estate and stock was to use the percentages of total gains realized from real estate and stock in 1936, from Seltzer, *op. cit.*, Appendix. The figures remaining, then, are the total unrealized gains and losses arising from real estate, from stocks, and from unincorporated enterprises. The text conclusion is then reached by dividing each of these figures by individuals' total holdings of each of these assets, found in Goldsmith, *op. cit.*, p. 197.

The basic method used to calculate this tax increase was, first, to estimate the amount of unrealized gains and losses in any relevant income, age, or wealth group by multiplying that group's holdings of real estate by 55 per cent and equity in business (incorporated and unincorporated) by 40 per cent. The resulting estimate of unrealized gains was then multiplied by 25 per cent [10] to establish the capital gains tax that would have to be paid on these unrealized gains were they constructively realized. In the case where the increased capital gains tax would accrue at the same time as the levy of an estate tax, the *net* increase in total taxes (i.e., estate tax plus capital gains tax) was computed; the increased capital gains tax was deducted from the net taxable estate, which resulted in a reduction of the size of the net estate and thus of the estate tax itself. The sum of the capital gains tax on the unrealized gains and the lower estate tax is called " the total new tax."

This method, with suitable variations necessitated by the available data and the particular tax proposal studied, was applied throughout. The basic assumptions underlying this method are the following:

1. The method for deriving unrealized gains and losses from net worth data yields satisfactory estimates of these gains and losses.

2. The percentages that unrealized gains and losses are of total real estate and business equity holdings are similar for all groups (for example, income,

[10] The 25 per cent rate was only used where the group being studied was in a high enough income bracket to warrant payment of this rate. In lower income classes an appropriately lower effective tax rate on the unrealized capital gains was used.

wealth, and age) in the population.[11]

3. The results reached in this paper, using 1949 and 1950 data, are reasonably applicable to current tax years.

Before turning to the detailed results, investigation of the validity of these assumptions is appropriate at this point.

Methodology — Validity and Significance of Results

The validity of using net worth data to derive estimates of unrealized gains will be examined first. It should be made clear, at the outset, that the reliability of the Goldsmith net worth data are fundamental to this paper. To date, no serious objections concerning these data have been raised, and they have been used here without reservation.[12] The Goldsmith net worth data reflect, in addition to the factors shown in his wealth data (primarily cumulated domestic saving and changes in the prices of tangible assets), the effects of realized capital gains and losses and of unrealized appreciation or depreciation attributable to changes in the prices of equity securities. If changes in personal savings and realized gains by individuals are subtracted from the change in individuals' net worth figure over time, the remainder (unrealized appreciation or depreciation due to changes in the prices of securities and tangible assets) may be termed "unrealized gains and losses." Of course, all of the thus derived unrealized gains would not be taxable as capital gains if unrealized gains were constructively realized. In a system which continues to differentiate between capital gains and regular income, part of this total would be called regular income.[13] Also, some of these unrealized gains undoubtedly have already been passed on by decedents to heirs, who retain them at the assets' value as of the decedents' death. These gains, which have already been passed on to heirs, are simply not taxable, and can never be taxed. Furthermore, some of these unrealized gains accrued before 1913, and are thus not taxable as income. Nevertheless, it is unlikely that the bulk of the unrealized gains since 1900 have already been passed on to heirs, or that the pre-1913 amounts of these gains are large. The Goldsmith data, with the adjustments described, show that more than $200 billion of the total $325 billion unrealized gains amassed by individuals between 1900 and 1949 accrued between 1940 and 1949. While this approach undoubtedly exaggerates the situation to some unknown degree, nevertheless, the unrealized gains (which, by our method derive exclusively from heretofore untaxed appreciation in the price of assets) are all considered as potential capital gains.

The second assumption, which implies a uniformity of the *proportion* of unrealized gains among various subgroups of the population (the absolute amounts of such gains depending upon each group's holdings of price sensitive assets) is, of course, somewhat unrealistic. It may be true, for example, that current market values of properties owned by older individuals represent a higher proportion of unrealized gains than do properties owned by younger people.

[11] For example, if group *A* owns half as much real estate and equity in business as group *B*, it was assumed that group *A* also has accrued only half as much unrealized gain as group *B*.

[12] For an analysis of Goldsmith's book, see J. N. Morgan "Goldsmith's *Study of Saving in the United States*," *American Economic Review*, June, 1956, XLVI, 370-384.

[13] Because of their nature, however, very little of these unrealized gains would fall into the "regular income" category if they were constructively realized.

However, no data exist with which this differential might be measured. Furthermore, the effects of age, income, and wealth on the distribution of unrealized gains are not entirely clear on *a priori* grounds. Therefore, in the absence of data to the contrary, the " uniformity assumption " is made throughout: unrealized gains have been distributed to each subgroup studied in proportion (the same proportion for all groups) to the group's holdings of price-sensitive assets.

The last facet of the methodological problem is the applicability question: How useful are the results, obtained as they were from data collected before 1950? While it is true that the absolute amounts of unrealized gains have increased greatly since 1949 (the terminal date of the data series used), a substantial part of the study's results depends primarily upon the proportion that unrealized gains were of the total value of assets as of 1949. This percentage might be expected to change fairly slowly over time. Therefore, the results where stated in percentage terms may be expected to be reasonably applicable to current tax years. Where the results are stated in absolute terms, the reader is cautioned to keep the time reference, 1949-1950, in mind. In fact, all the foregoing limitations should be kept in mind in appraising the detailed results which follow.

Results of the Statistical Investigation

The detailed statistical results of the study will be presented in four sections. The impact of constructive realization at death is studied, first, in relation to the estate tax population, and then with respect to the remainder of the population holding price-sensitive assets. The " estate tax population " is that group with potential estates of $60,000 or more. This group is analyzed separately from the rest of the population owning price-sensitive assets because of the disproportionate amount of real estate and common stocks it owns. Furthermore, the implementation of the constructive realization doctrine would be far simpler if only those estates which are presently considered taxable for federal estate tax purposes were brought under the doctrine.[14] The last two sections pertain to the periodic accrual of unrealized gains. Here, also, the analysis separates the estate tax population from the remainder holding price-sensitive assets. In this case, the division is made primarily for the sake of expositional convenience.

Impact of proposal to realize gains and losses constructively at death—Estate tax population. The first proposal to be analyzed will be that of taxing unrealized gains at death as if they had been realized. A feasible approach would be to tax the unrealized gains accrued at death in estates subject to estate tax. The estate tax population in 1950 consisted of 994,100 individuals.[15] This group's total wealth, $187.0 billion in 1950, included $33.7 billion in real estate, $72.6 billion in common stock, and $12.2 billion in unincorporated enterprises. Using the 55 per cent and 40 per cent estimates of the percentage of unrealized gains in the 1949 market value of real estate and business equity holdings of individuals,[16] the estate tax population in 1950 held $33.9 billion of unrealized gains in common stock and

[14] This is not meant to imply that such a limitation would be desirable on other grounds.

[15] See Appendix I for the methods used in deriving this and other figures used in this paragraph. The annual death rate of this population is less than 20,000.

[16] See above, p. 269.

equity in unincorporated enterprises, and $18.5 billion of unrealized gains in real estate holdings.

The best way to show the effects of constructive realization on the estate tax population is to examine what would have happened to total taxes paid at death on taxable estates had unrealized gains been constructively realized at death. The method described above has been applied to federal estate tax data published in *Statistics of Income* for 1949,[17] and the results are presented in Table 1. Data are shown for all 17,379 estates in the aggregate and for selected net estates (before specific exemption) size classes.

The results are very interesting. Total taxes (i.e., capital gains plus new estate tax) to be paid at death would have increased by 40 per cent over the old estate tax. The increase would have caused a doubling in taxes paid at death for the smaller estates and would have declined as a proportion of the original estate tax as estates increased in size. The effective tax rates would have been noticeably affected, the increase being largest in the smaller size estates. The total effective tax rates at death, measured in this way, would have become almost proportional rather than progressive in the 1950 estates.

The foregoing relationships are less true if the new taxes are computed as a

TABLE 1

EFFECTS OF TAXING UNREALIZED GAINS AT DEATH AS IF REALIZED, SELECTED NET ESTATE SIZE CLASSES, 1949 ESTATES

(Dollar figures in millions)

	Item	All Estates	Net Estate Size Class				
			$100,000–150,000	$300,000–400,000	$500,000–600,000	$800,000–900,000	$1,000,000–1,500,000
1	Number of estates	17,379	3,728	560	168	64	128
2	Net estate before exemptions	$2,958.5	$449.9	$192.8	$91.4	$54.2	$152.5
3	Old estate tax	483.5	36.2	40.1	21.7	14.1	42.6
4	Total unrealized gains	1,130.3	177.0	72.5	32.3	18.6	57.0
5	Capital gains tax on unrealized capital gains	282.5	44.3	25.4	8.1	4.7	14.3
6	New estate tax	396.2	27.1	33.0	19.3	12.6	37.4
7	Total new tax	678.7	71.4	58.4	27.4	17.3	51.7
8	Increase in taxes	195.2	35.2	18.3	5.7	3.2	9.1
9	Difference between effective tax rates	6.6%	7.9%	9.5%	6.3%	5.9%	6.0%
10	New effective tax rate	22.9	15.9	30.3	30.0	31.9	33.9
11	Tax increase as percentage of old estate tax	40.4	97.2	45.6	26.3	22.7	21.4

Sources of Table 1:
Line (1), (2), (3): *Statistics of Income,* 1949.
(4): .55 (real estate holdings, reported in *Statistics of Income,* 1949) + .40 (equity in business holdings, reported in *Statistics of Income,* 1949).
(5): .25 (4).
(6): Estate tax computed on new net estate (i.e., (2) – (5) – exemptions).
(7): (5) + (6).
(8): (7) – (3).
(9): (7)/(2) – (3)/(2).
(10): (7)/(2).
(11): (8)/(3).

[17] See above, p. 269. Estate tax data for 1949 were the most recent data available when this study was made.

percentage of estates remaining after taxes. Even here, however, progression would have been decreased; effective tax rates, measured by this method, would have increased from 43 per cent in the \$300,000 to \$400,000 estate size class to 51 per cent in the \$1,000,000 to \$1,500,000 size class. Under the present estate tax, the increase is much sharper, rising from 26 per cent to 40 per cent.

The primary reason for this decrease in the total progression of taxation at death results from the fact that the percentages of real estate and of interest in unincorporated business generally decline with increasing size of net estate.[18] This decline more than compensates, as far as the results of this analysis are concerned, for the increasing percentage of corporate stock as estate size increases.

The breakdown shown in Table 1 provides some idea of what the proposed tax change would mean for the upper 2 per cent or so of wealth holders. Table 1 shows that, on the average, a little more than \$65,000 [19] of unrealized gains would have accrued per estate in 1949. This average rises from \$47,480 per estate in the \$100,000 to \$150,000 net estate size class to \$445,310 in the \$1,000,000 to \$1,500,000 net estate size class. If it were not for the lowering of the estate tax because of the deduction of the capital gains tax from the net estate, the average increase in tax at death would have been \$16,260. It would rise from \$11,870 in the lower size bracket to \$111,330 in the higher bracket. As it is, the increase in tax would have been \$11,230 on the average, rising from \$9,440 in the lower bracket to \$71,100 in the higher bracket.

These absolute dollar amounts of tax increase per estate would, of course, be expected to change from year to year, probably increasing over time. However, the percentage increases (such as shown in row eleven in Table 1) would be expected to remain fairly stable over time; thus, constructive realization would be expected to almost double taxes at death for smaller size estates and increase the tax on the larger estates by approximately 25 per cent.

Constructive realization of gains and losses at death — Remainder of population with holdings of real estate or equity in enterprises. If constructive realization were applied only to the estate tax population, a substantial proportion of the unrealized gains and losses as of 1949 would be taxed. An even greater amount, however, would not be taxed. Of the roughly \$200 billion total unrealized gains [20] accrued between 1923 and 1949, less than \$52.4 billion was held by the estate tax population in 1949.[21] Thus, 75 per cent of total unrealized gains would not be taxable as if constructively realized.[22]

[18] Computed from the *Statistics of Income* for several years.

[19] It is interesting to note that the average unrealized gains per taxable estate, \$65,040, considerably exceed the average unrealized gains in the entire estate tax population of \$52,710 (obtained by dividing the \$52.4 billion of unrealized gains held by the estate tax population by the 994,100 million members of the group in 1949). Though at first this may be surprising, it results from the fact that the estate tax population's wealth is owned by individuals whose wealth, on the average, increases prior to their death. Thus, the *decedents* of the estate tax population in any year are wealthier, on the average, than the average living member of the group. This fact is borne out by comparing the average economic estate of decedents in any one year with the average economic wealth of those in the estate tax population. The latter is usually only about 80 per cent of the former.

[20] See above, p. 270; also, Goldsmith, *op. cit.*, pp. 180-197.

[21] See above, pp. 271-2.

[22] The primary reason for this is that the estate tax population's holdings of (a) real estate is only 10 per cent of total real estate holdings by individ-

(See next page)

The remainder of these price-sensitive assets was held by those outside of the estate tax population. By deducting the unrealized gains held by the estate tax population [23] from total unrealized gains,[24] it was established that the non-estate tax population held \$17.8 billion of unrealized gains in stock, \$22.3 billion in unincorporated enterprises, and \$166.5 billion in real estate, in 1949.

How many people owned these assets? Survey of Consumer Finance data [25] for 1950 show that, of 52 million spending units, 3.5 million owned common stock, 4.9 million owned an interest in unincorporated business, and approximately 25 million owned real estate in one form or another.[26] If we assume that most of the approximately one million members of the estate population own some of each of the price sensitive assets and that each member of the estate tax population is a "spending unit", the total unrealized gains held outside of the estate tax population may be allocated among 2.5 million owners of common stock, 3.9 million owners of unincorporated enterprise, and 24 million owners of real estate. Distributing the total unrealized gains, as of 1949, outside of the estate tax population in this manner resulted in an average unrealized gain for each living member of the non-estate tax population holding the relevant asset, as of 1949, of \$7,120 in common stock, \$5,720 in unincorporated enterprises, and \$6,940 in real estate.

A member of this population who died in 1949 probably would have larger amounts of unrealized gains than the average of the entire (i.e., living and deceased) non-estate tax population. In the last section it was shown that the average holdings of the deceased members of the estate tax population exceeded the average holdings of the living members by approximately 25 per cent.[27] Table 2 is the result of applying the 25 per cent increase factor to the average holdings of the living non-estate tax population.

TABLE 2

The Effect of Constructive Realization Upon Owners of Price Sensitive Assets Held Outside of the Estate Tax Population, 1949 *

Type of Asset	Number of Holders Outside of Estate Tax Population (in millions)	Average Unrealized Gains per Deceased Member of Group	Capital Gains Tax on Unrealized Gain
Stock	2.5	\$ 8,900	\$2,225
Equity in Unincorporated Enterprise	3.9	7,150	1,790
Real Estate	24.0	8,675	2,170
		\$24,725	\$6,185

* For derivation of columns (1) and (2) see text. Column (3) = .25 (2).

The total figure for the average unrealized gains of a deceased member of this population, \$24,725, is comparable to the \$65,040 average amount held by

uals, (b) common stock is 62 per cent of all individual holdings, and (c) incorporated enterprises is 18 per cent of all individual holdings. These were computed by dividing the asset holdings of the estate tax population by the total holdings of each asset type found in Goldsmith, *op. cit.*, p. 197.

23 The unrealized gains of the estate tax population in 1949 by our method were: \$29.0 billion in stock; \$18.5 billion in real estate; and \$4.9 billion in unincorporated enterprises. See above, pp. 271-2.

24 Total unrealized gains in 1949 were: \$185.0 billion in real estate; \$46.8 billion in common stock; and \$27.2 billion in unincorporated enterprises. See above, p. 269.

25 Goldsmith, *op. cit.*, p. 217-8.

26 Actually, 20.4 million owned a house, 3.2 million owned a farm, and 8.3 million owned other real estate. Since some [illegible]e spending units undoubtedly owned more thar[illegible] type of asset, the text states that approximat[illegible] million owned some real estate.

27 See, fn. 19, p. 273. \$65,040 ÷ \$52,710 = 1.25.

deceased members of the estate tax population. However, this total figure should not be construed as applying to *all* (24 million plus) members of the population being considered in this section. As Table 2 indicates, at a maximum, 2.5 million individuals *may* be so affected as to have to pay another $6,185 capital gains tax at death.[28] *All* 2.5 million owners of stock *would be* so affected if they also owned real estate and equity in unincorporated enterprises. It should be made clear at this point that *since only a small percentage of this group of 2.5 million died in 1949*, the $6,185 figure is only relevant to those individuals. Since unrealized gains have undoubtedly increased since 1949, this figure should be regarded as a minimum estimate of what constructive realization at death could mean for those in the non-estate tax population holding many different kinds of price-sensitive assets.

Another 1.4 (i.e., 3.9-2.5 from Table 2) million individuals may own both real estate and interest in unincorporated enterprises. Members of this group would, on the average, have constructively realized $15,825 at death in 1949, and would thus have paid $3,960 in taxes. Finally, another 20.0 million or so, would have been affected solely by constructive realization of real estate gains. On an average, decedents in this group in 1949 would have had to pay $2,170 in increased capital gains taxes on $8,675 of constructively realized real estate gains.

So far, the discussion of this section has related to the asset holders of the non-estate tax population. Nothing has been said as to who these asset holders are. It is also helpful to ask: Which income, net worth, and occupational groups of this population would be most affected by constructive realization at death?

By assuming that unrealized gains are distributed in the same manner as price-sensitive assets are distributed among income, net worth, and occupational groups,[29] estimates of aggregate unrealized gains [30] for each of several income, net worth, and occupational sub-groups were obtained. They are shown in Table 3. The results of Table 3 indicate the following points:

TABLE 3

UNREALIZED GAINS (OUTSIDE OF THE ESTATE TAX POPULATION) OF PRICE SENSITIVE ASSETS BY INCOME, NET WORTH, AND OCCUPATIONAL CLASS, 1949

	Per Cent of Group in Population *	Aggregate Unrealized Gains (billions of dollars)	Percentage Distribution
Income group			
0–$1,999	34%	$ 37.5	17.5%
$2,000– 3,999	40	50.8	23.7
4,000– 7,499	23	57.9	27.0
Over 7,500	3	68.1	31.8
Total	100%	$214.3	100.0%
Net Worth group			
Negative to $900	20	0	0
$ 1,000–$ 4,900 ..	18	3.0	1.4
5,000– 24,900 ..	35	45.4	21.2
25,000– 59,900 ..	25	44.0	20.5
60,000 & Over ..	2	121.9	56.9
Total	100%	$214.3	100.0%
Occupational group			
Professional	7	23.3	10.9
Managerial	4	14.6	6.8
Self-employed ..	8	60.3	28.2
Retired	5	25.0	11.6
Other	75	91.1	42.5
Total	100%	$214.3	100.0%

* Excluding estate tax population.

(See next page)

[28] Since members of this group would not have had to pay estate taxes, the full $6,185 would have been additional taxes at death. No estate tax would have been indirectly reduced by the increased capital gains tax.

1. A substantial amount of unrealized gains (more than 90 per cent which are in real estate) accrue to lower income taxpayers. The lowest 74 per cent of the income receivers in the non-estate tax population owned more than 40 per cent of total unrealized gains in business equity and real estate in 1949.

2. Price sensitive assets are distributed throughout net worth units in such a way that a more skewed distribution of these unrealized gains occurs than in the distribution by income. The impact of constructive realization at death would be great only for the highest net worth class. Even so, over 40 per cent of the aggregate unrealized gains would be realized by units with net worth less than $60,000.

3. Due to the large amounts of unrealized gains in unincorporated enterprises, self-employed individuals would be the occupational group absorbing the heaviest impact of the proposed tax revision. If all self-employed individuals held each of the price sensitive assets, they would incur, on the average, a $3,000 to $4,000 additional tax at death.[31] Since all self-employed people do *not* own all these assets (some do not own any), the average expected impact upon individuals in this group who hold these assets would be considerable. The other occupational groups would seem to be affected to a much smaller extent.

Periodic accrual of the unrealized gains of the estate tax population. In order to appraise the impact of the proposal periodically to accrue and tax unrealized gains, it is necessary to know, *by age bracket*, the average holdings of different kinds of assets. Such a distribution is available for the estate tax population, only for 1944.[32] However, it is doubtful if the *average* holdings shown for 1944 differ greatly from those of 1949, since the primary difference between the estate tax population of these years is in the *numbers* of the estate tax population.[33]

The average wealth of a member of the estate tax population increases at approximately one per cent per year.[34] The average wealth held in different assets increases at different rates. In 1944, a 25 year old member of the estate tax population owned an average $23,000 worth of real estate and an 80 year old member $38,000.[35] Also in 1944, a 25 year old member of the group owned $67,000 worth of equity in both incorporated or unincorporated businesses, and the 80 year old owned $107,000 on the average.

On the assumption that 40 per cent of the value of equity in business and 55 per cent of the value of real estate holdings (including their initial holdings) are unrealized gains, Table 4 shows how the unrealized gains would accrue and be taxed at a 25 per cent rate at ten-year intervals beginning at age 25. The assumption that initial holdings of price-sensitive assets include the same share of unrealized gains as later holdings is undoubtedly somewhat unrealistic and is partially responsible for the large tax accrued during the first two evalua-

[29] Goldsmith, *op. cit.*, volume III, pp. 126-129.

[30] Unfortunately, the average unrealized gains for members of each of these sub-groups owning price sensitive assets could not be derived. No data existed which showed the numbers of holders of each of these assets in each sub-group.

[31] $28.2 billion/.08 × 52 million self-employed spending units = $14,360; $14,360 × .25 = $3,590.

[32] Mendershausen, "Patterns of Estate Tax," *op. cit.*, p. 372.

[33] See Appendix I.

[34] Goldsmith, *op. cit.*, p. 223.

[35] Mendershausen's table showing this data is an average holding based on the assumption that all estate tax holders in each age group held the asset.

tions.[36] Some of these initial amounts actually would *not* be taxed after the periodic accrual proposal were put into effect because (a) many of the initial holdings represent gains which can never be taxed due to their having been received in an estate transaction, and (b) after the law has been in effect for some time, decedents would be taxed on the increase in value before passing it on to the heirs. However, since no data exist which provide a corrective factor, Table 4 should be considered only a first pass at a difficult problem and not a definitive estimate. It should also be noted that to the extent that unrealized gains increase over time, Table 4 does not represent the time distribution of unrealized gains accrual which would occur for any one individual over a lifetime.

TABLE 4

Unrealized Gains Accrued by Members of the Estate Tax Population at Stated Ages, Average Amounts, 1944 Data *

Age	Amount	Capital Gains Tax
25	$19,720	$ 4,930
35	21,920	5,480
45	1,200	300
55	2,800	700
65	12,450	3,110
75	5,500	1,380
	$63,590	$15,900

* Derived from Table E-61, Mandershausen, "Patterns of Estate Tax," *op. cit.*, p. 372.

Table 4 does *not* state that *all* members of the estate tax population would be taxed as shown. Table 4 relates only to those in the estate tax population who were members from the age of 25 and on. Actually, many individuals do not enter the estate tax population until a later age.[37] Also, many individuals in the estate tax population sell their price-sensitive assets before death. For the group entering the estate tax population in later years but holding price-sensitive assets until death, Table 4 is conceptually correct, although somewhat compressed. For individuals selling price-sensitive assets before death, Table 4 should be truncated by cutting off the later numbers at the relevant points.

Since many enter the estate tax population at a young age and retain price-sensitive assets most of their lives, Table 4 is a good representation of the impact upon this group. Except for the first accruals, where unrealized gains never before taxed may now be taxed, the yearly tax increases are small. It must be remembered, however, that Table 4 only shows average amounts; many individuals would pay much higher amounts.

Periodic accrual of unrealized gains for the remainder of the population holding price-sensitive assets. For the remainder of the population holding price-sensitive assets, average net worth increases at the rate of about five per cent per year of age.[38] The relevant data for examining the impact of periodic accrual upon this group are the average amount, by age groups, *per spending unit owning the specified asset*, of equity in business and real estate.[39] The 40 per cent and 55 per cent

[36] Since many wealth holders do not enter the estate tax population until they are 30 years old, the initial holdings of assets were allocated between the first two age groups. This causes the large tax in the periodic accrual at age 35. If the initial holdings had all been placed in the 20-29 age bracket, the taxes in Table 4 at age 25 would have been $9,860 instead of $4,930, and $550 instead of $5,480 at age 35.

[37] In 1944, 28,000 members of the population were between 20 and 30 of age, 140,700 were between 30 and 40 of age, and 211,191 were between 40 and 50. Mendershausen, "Patterns," *op. cit.*, p. 368.

[38] Goldsmith, *op. cit.*, V. 1, p. 222-3.

[39] These data are available for 1950. *Ibid.*, p. 218.

unrealized gain percentages for equity in business and in real estate are applied, respectively, to the increases in the average value of these assets owned by successively older 10-year age groups in Table 5. The results show the average unrealized gains that would be accrued at each age level. Table 5 also shows the taxes that would be paid on these gains at an average tax rate of 20 per cent.

As in the case of Table 4, Table 5 only holds *in toto*, for members of this year. Of course, this only describes what would occur on the *average;* many taxpayers, particularly those in the upper income and net worth classes in each age group, would be taxed more severely. However, it should be kept in mind that the last column of Table 5 does not pertain to *all* members of the population group outside of the estate tax population holding price-sensitive assets. This column only relates to those in this population who hold all the assets all through life. Of the 24 population who hold *all* the assets *all* through life. In the case of individuals who do not own the assets throughout life, the distribution should be compressed. Also, in cases where assets are sold before age 65, Table 5 should be truncated. Unfortunately, data indicating the extent of movement into and out of such assets are not available.

TABLE 5

Average Unrealized Gains and Tax on These Gains at Stated Ages, Remainder of Population, 1950 Data

Age	Stock		Unincorporated Business		Real Estate			
	Unrealized Gain	Tax	Unrealized Gain	Tax	Unrealized Gain *	Tax	Total Gain	Total Tax
24	$ 470	$ 94	$ 1,460	$ 292	$ 3,000 †	$ 600	$ 4,930	$ 986
34	130	26	2,540	508	7,450	1,490	10,120	2.024
44	3,130	626	320	64	1,720	344	5,170	1,034
54	1,290	258	2,560	512	.....	....	3,850	770
64	550	110	4,840	968	2,540	508	7,930	1,586
74	1,030	206	.....	....	.....	....	1,030	206
Total	$6,600	$1,320	$11,720	$2,344	$14,710	$2,942	$33,030	$6,606

* The difference between successive sums of ownership in house, farm, and " other real estate."
† This includes only unrealized gains on " other real estate."

As was true for the estate tax population, Table 5 shows that periodic accrual would lead to relatively heavy taxes on unrealized gains during the first two accruals, unless these gains had been taxed before. The amount of tax however, is not very large in any accrual million or more units in this population group, only 2.5 million hold stock and 3.9 million an interest in unincorporated enterprises,[40] and therefore most taxpayers in this population group would on the average be taxed less severely than is shown in the last column of Table 5.

Some Possible Economic Effects

Having indicated the general magnitude of tax increases under both tax proposals, it seems appropriate to list and discuss briefly some of their possible economic effects. Of primary interest

[40] See above, p. 274.

is the effect on the capital asset market. National income might also be affected, however, by the aggregate tax revenue increase unless government expenditures were also increased to offset the deflationary effects of the tax increase.[41]

Revenue effects.[42] Nothing has been said thus far about the aggregative increase in taxes that would result from this tax proposal. Table 1 indicated that, for 1950, those exposed to estate taxes would have had their taxes increased by almost $200 million if their unrealized gains had been constructively realized at death. For the remainder of the population, estimates based on the results of the previous section indicate a gain of $1.0 billion in revenues yearly.[43] This estimate is based on the following assumptions which tend to neutralize one another:

a) There is no further rise in net unrealized gains beyond the 1949 level.

b) There are no losses in other taxes due to the taxation of unrealized gains.[44] Based on these two assumption, an annual revenue increase of approximately $1.2 billion seems indicated.

Effect of constructive realization at death on the liquidity of the estate tax population. One of the more specific economic effects of constructive realization of gains and losses at death would be the effect on the liquidity position of estates. The effect is most clearly seen by comparing the liquid and near-liquid asset positions of various size estates, as reported in 1949 estate tax returns,[45] with the liquid and near-liquid asset positions of these estates if unrealized gains had been constructively realized at death.[46] For the purposes of the analysis, federal, state, and municipal bonds were considered "very liquid," as were two-thirds of "other bonds," taxable insurance, and cash. Fifty per cent of common stock was defined as "liquid."[47]

The computation revealed that, whereas very liquid assets were 262 per cent of the estate tax and very liquid plus liquid assets were 427 per cent of the estate tax for all estates in 1949, these rates would have fallen to 186 per cent and 305 per cent, respectively, had gains been constructively realized in these 1949 estates. In estate size classes greater than $300,000 (net estate before exemption), all the ratios were lower than these. In the $1,000,000-$1,500,000 size class, for example, the very liquid ratio would have decreased from 127 per cent to 104 per cent and the very liquid plus liquid ratio from 261 per cent to 215 per cent.

When shrinkage in the size of the estate from probation and administration expenses is considered along with the subsequent increase (about 15 per cent on the average) in tax liability for these

[41] Another possible effect on national income, even if government expenditures were increased, would be the effect of lowering the aggregate savings-income ratio: higher income people would probably pay relatively more taxes than they do under the present system.

[42] The revenue effect of constructive realization of gains and losses at death is analyzed. The periodic accrual proposal, while not analyzed, should not produce noticeably different revenue results over a period of time.

[43] See Appendix II for the derivation of this estimate.

[44] Realized capital gains may actually increase as a result of the change, thus decreasing the gains that would be constructively realized. The total increase in taxes would remain approximately the same, however.

[45] *Statistics of Income*, 1949.

[46] From Table 1, p. 272 above.

[47] The procedure used follows that in C. L. Harris, "Liquidity of Estates," *Political Science Quarterly*, v. 64 (1949), p. 533-59.

estates after audit, it can be seen that the change in the tax law under consideration would cause significant difficulties, particularly in the case of estates of more than $300,000. Most of these estates certainly would be forced to liquidate assets of less than the highest liquidity. Since many of the medium-size estates hold stock in only one corporation, this would severely intensify the problems of small businesses on the death of one of the owners.[48] At the very least, taxing unrealized gains at death would severely increase the liquidity problems of many estates.

Effect on the mobility of capital assets. The problem of capital transfers poses a fundamental conflict for economic policy: on the one hand, economists desire the free mobility of economic resources; on the other hand, it is acknowledged that a certain immobility of investment or willingness to " stay put " with an investment is a desirable element in a capitalistic economy.

The present tax law's realization criterion has resolved the disagreement in favor of the rigidity of the capital market, since it leaves the timing of capital transfers to the discretion of the taxpayers and *appears to* tax the act of the transfer. On the other hand, an annual or even periodic constructive realization might resolve the question in favor of too little rigidity in the capital market. If accrued capital gains were constructively realized only at death, it is quite possible that the small number [49] of tax motivated sales of small businesses (in order to meet estate tax obligations) would increase greatly. Those estates which already have the heaviest liquidity burdens would probably be the most seriously injured. Over the long run, it is probable that corporate owners would become better prepared for the tax on unrealized gains. However, the price paid for having fewer forced sales would be a tendency for investors, who formerly would have risked their capital for longer periods, to keep more of their wealth in liquid form. The effect would be a shift of resources from investment in companies of a riskier type to investment in companies of a more stable type.

Other economic effects—Clearly, the constructive realization proposal would also influence the level and extent of fluctuation in the prices of capital assets, as well as the level of aggregate investment and its distribution by type of risk. Tentative analysis of the effect on the supply and demand curves for capital assets indicates, for example, that the proposal would tend to stabilize the price level for capital assets over the business cycle and decrease the long run price-level of appreciation-producing and price-fluctuating assets relative to other assets. Similarly, analysis of the effect of the proposal on the inducement and capacity to invest [50] in capital assets of various types indicates that investment in risky, growing enterprises, as well as aggregate investment, would decrease. Unfortunately, space limitations prevent a discussion of these economic consequences.

All of these economic effects, and others, certainly must be investigated more fully before deciding the desirability of the proposal. It is hoped that the statistical background furnished by

[48] See Butters, J. K., Lintner, J., and Cary, W., *Effects of Taxation on Corporate Mergers*, Boston, Harvard Business School, 1951, Ch. 2.

[49] *Ibid.*

[50] Along the lines of the J. K. Butters, L. E. Thompson, and L. L. Bollinger study, *The Effects of Taxation-Investment by Individuals* (Boston, Harvard Business School, 1953).

this study will be of help in appraising these effects.

APPENDIX I

Data on the Estate Tax Population

To derive the number and wealth of the estate tax population, the estate multiplier method was used: the reciprocals of entries in a selected table of mortality rates was multiplied by the number and total estates of those in each estate class age group.[1] The computations indicated an increase in the estate tax population of from 872,000 to 994,100 from 1944 to 1950, and a rise in their economic estates from $135.4 billion to $155.9 billion. Both of these dollar figures are probably about a 20 per cent underestimate [2] due to intervivos gifts, increases by audit, and the increased value of insurance at death. Thus, the wealth of the estate tax group in 1950 is computed to be $187.0 billion.

To find the value of each type of asset held by the estate tax population, the percentages of certain types of assets found in estates [3] was multiplied by $187.0 billion.

[1] This method is discussed in H. Mendershausen and R. W. Goldsmith, "Measuring Estate Tax Wealth," *Studies in Income and Wealth* v. 14, National Bureau of Economic Research (New York, 1951) pp. 125-42. The table of mortality rates used in the above computations was the 1944 Metropolitan $5,000 whole life table, recommended in that article. No correction was made in the above estimates for the overestimates in estate tax wealth caused by using face value, rather than the reserve value, of insurance in the wealth of the living.

[2] *Ibid.*, p. 139.

[3] Computed from *Statistics of Income* for relevant years; also used were data showing the percentage of assets, held by the estate tax population, falling into each type of asset class. See H. Mendershausen, "The Pattern of Estate Tax Wealth," *op. cit.*, pp. 359 and 365.

APPENDIX II

Estimate of Revenue from Taxing Gains as if Constructively Realized at Death—Population Holding Price-Sensitive Assets Outside of the Estate Tax Population.

The $1.0 billion yearly estimate stated in the text was reached in the following manner: The " devolution method " of arriving at the numbers of those in the living population who are in a certain group from which a known number of decedents occur in a given year indicates that a 1 to 50 ratio of decedents to living is a good estimate.[4] Given the estimates in the text [5] of 2.55 million taxpayers accruing about $25,000 in unrealized gains at death, 1.40 million accruing $16,000, and another 20.0 million accruing $9,000, the cumulative figure of $268.7 billion [6] is taken as the eventual value to be reached in the estates of these taxpayers. If one-fiftieth of this, $5.36 billion is accrued each year and taxed at the rate of 20 per cent,[7] the yearly total increase in tax revenues would be slightly more than $1.0 billion annually.

[4] See Mendershausen, "Pattern of Estate Tax Wealth," *op. cit.*, pp. 341-2.

[5] See above, p. 275.

[6] It should be noted that this is the *potential* amount of unrealized gains accruing to this group, not the present amount of approximately $200 billion held by it.

[7] Since many of the taxpayers who would pay these additional taxes would be in too low a bracket to use the alternative rate, the 20 per cent figure was arbitrarily used instead. It is probably not too high, since lower income taxpayers would be moved into a higher bracket as a result of their unrealized gains being constructively taxed as income.

A NOTE ON STATE RESERVE PLANS IN OPERATION

NATALIE J. MARSHALL *

MANY proposals for state stabilization or reserve plans have been made in the past thirty years, yet few have been enacted into law. The proposals have been very adequately discussed elsewhere; [1] the common aim was the elimination of the tendency of state tax rates to accentuate the business cycle. The purpose here is to examine the influence which the plans may have had on current practice.

Forty-four state treasurers, or comparable state officials, responded to a questionnaire sent out recently by this writer. Of this number five, representing Arkansas, California, New York, South Carolina, and Utah, reported the existence of some form of reserve. Other states had created surplus funds in 1941-45 for postwar building, but these funds have since been exhausted (e.g. Missiouri). It is assumed that the four states not responding, Kansas, Montana, Nevada, and West Virginia, do not have reserve plans in operation.

The earliest of the five existing reserves was set up by the 1945 "Revenue Stabilization Law" in Arkansas. The actual operation of the plan is governed by Act 425 of 1955 which prorates state income among the several participating state agencies with a "cushion" fund as a reserve for use in lean years.

Some years ago in California a $75 million appropriation was made from surplus funds to a Revenue Deficiency Reserve Fund. This fund was set up to cover any future excess of operating expenses over revenues, with outpayments subject to the dictates of the legislature. It is not a revolving fund.

The New York State fund, which was established April 1, 1946, is the most widely known of the reserve plans. In brief, it is a two part reserve to stabilize the Local Assistance Fund and the State Purposes Fund. At the end of each fiscal year the operating surplus is put into the respective reserves until the reserves reach certain levels, after which the surplus is applied to tax reduction. The local assistance reserve is limited to 45 per cent of the current year's expenditure on local assistance while the state purposes reserve is restricted to 35 per cent of the year's expenditure on state purposes. Deficits in the operating revenues will be met from the funds, and when the funds fall below 25 per cent they are to be built up within six years. Borrowing from either reserve

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[1] Alvin H. Hansen and Harvey S. Perloff, *State and Local Finance in the National Economy*, W. W. Norton & Co., 1944. Louis Shere, *A Statistical Approach to Certain New York State Tax Problems*, 1932. And there are many other excellent discussions.

fund in anticipation of tax collections, or between funds, is permitted under prescribed conditions. The comptroller is empowered to invest reserve fund moneys not required for immediate expenditure in bonds or notes of the United States and certificates of deposit of a bank or trust company in New York State.

The legislature of South Carolina established its reserve plan in 1954. All revenues except those of the Highway Department are stabilized by a reserve built from yearly surpluses. The maximum size of the fund is to be $3 million. Inpayments are made when a surplus arises, and outpayment is made as needed to avoid a deficit in the General Fund. Currently there is no balance in the fund, but when one does appear it will be administered by the State Budget and Control Board.

The State of Utah established a reserve fund on July 1, 1955, by act of the state legislature. Inpayments are to be made quarterly as surpluses are available, with the maximum size of the fund set at $5 million. The fund has no balance currently, and the rate of spending is as yet undetermined. The money will be spent for public welfare purposes as determined by the state legislature. As they arise, surpluses will be administered by the state treasurer with the approval of the Board of Examiners.

Several states reported having considered the adoption of reserve plans, and they gave a variety of reasons for rejecting the idea. For example: Alabama turns all surpluses over to education; Mississippi prefers a pay as you go plan, changing the tax system every two years if necessary; Nebraska reports that politics demand keeping taxes as low as possible; and Pennsylvania is required by constitution to have a balanced budget. During the war North Carolina, like many other states, set up a temporary investment fund from surplus reserves in the General Fund. This fund then was used to establish sinking funds for debt retirement and to improve state educational and charitable institutions. The unused funds were invested in 1949 in short-term United States treasury securities and in time deposits in North Carolina banks. The securities can be sold in time of need, and they currently yield an annual income of almost $2 million.

The state officials who filled out the questionnaire indicated their personal interest in and support of some form of revenue stabilization program, despite an official lack of interest on the part of the states. According to most theoreticians, reserve plans should be automatic with the funds invested in such a manner as to be free from raiding by the legislature. Yet they must also be flexible enough to provide for the rising cost of government.

No attempt has been made here to appraise the plans in action; David M. Blank has already done that thoroughly for the New York plan,[2] and the others are too recent in origin for evaluation. Nonetheless a few comparisons based on the plans as they appear on paper are possible. The New York fund appears the most completely automatic. In all the others legislative discretion plays an

[2] David M. Blank, "Reform of State-Local Fiscal Relations in New York," *National Tax Journal*, III and IV, December, 1950 (pp. 326-347) and March, 1951 (pp. 77-91).

important part. The other plans also are less closely tied to increasing government expenditure. The California plan, with a single large original appropriation, will need legislative action to continue after the first important downswing; the others would automatically restore themselves. Raiding of the funds for other purposes is a danger in all, and all five suffer from the difficulty pointed out by Dr. Blank in regard to the New York fund—if the reserves are not (or cannot be) built up in prosperity, they are of no value.

An additional section on the questionnaire revealed that in 19 of the 28 states which responded to this section, municipalities are empowered to have some type of reserve plan.

NTA NOTES

Notes from the President's desk

The forthcoming Columbus, Ohio Conference (October 21 through October 25) will mark our Fiftieth Anniversary as a tax association. This alone should encourage you to attend. Please make early reservations at the Deshler Hilton Hotel and take part in the Conference and the celebration. I am looking forward to greeting you there.

Our latest committee is now underway. This is the Committee on FINANCING PUBLIC EDUCATION. The Chairman is Mr. Roger A. Freeman, Vice President of the Institute for Social Science Research, Washington, D.C. This Committee is composed of eleven members. The original thought was for a five-man committee. As we progressed, it seemed like seven men would needed; now, in its final form, the committee will consist of eleven men. This I did for reasonable balance and to assure a quorum and strength for the committee to progress. One feature of this committee which makes it unique is the appointment of a sub-committee of statisticians to assist in gathering their data.

The transfer of all records from the Sacramento office to Harrisburg has now been completed. Some confusion was encountered in the transfer but we now believe everything is operating smoothly. We apologize if there has been any inconvenience.

Our recent July Executive Committee meeting, held in Salt Lake City, Utah, had twelve members present. That is good attendance. Your President appreciates the interest shown.

This, perhaps, will be the last of the Notes from my desk as President of the National Tax Association. May I express to each and every one of you my appreciation for your wholehearted support. Please forgive me for any shortcomings during my tenure in office. At least we tried to give an aggressive and business touch to the past year.

Remember, you, too, are expected to get some new members. Thank you.

Committee appointments

The eleven members of the Committee on Financing Public Education appointed by President Reuther are: Roger A. Freeman, Chairman, Vice-President, Institute for Social Science Research, Washington, D.C.; Harry C. Williamson, Vice-Chairman, Union Electric Company, Missouri; Eugene L. Maynard, Department of Revenue, Illinois; Everett N. Luce, Pres., National School Boards Assn., Michigan; Francis J. Carr, Pacific Gas & Electric Co., California; Aaron K. Neeld, State Treasurer, New Jersey; William G. Herzel, Department of Revenue, Kentucky; Anthony G. Quaremba, Vice-President, City Bank Farmers Trust Company, New York; Thomas G. O'Keefe, Ohio Educational Assn., Ohio; Dr. John Sly, Princeton University, New Jersey; James V. Jordan, Budget Director, Alabama.

The membership of the Committee on Intergovernmental Fiscal Relations, of which Dr. Alfred G. Buehler is Chairman, has been expanded because of the growing importance of the work of this committee. The new members (all State Tax Commissioners) are: Stanley J. Bowers, Ohio; John Dane, Jr., Massachusetts; Martin Lauterback, Iowa; Otis W. Livingston, South Carolina and Dixwell L. Pierce, California.

Committee meetings

Meetings of the following Study Committees were held prior to the Columbus Conference: BANK TAXATION—Carter T. Louthan, Chairman, at New York City; STATE EQUALIZATION OF LOCAL PROPERTY ASSESSMENTS—William G. Murray, Chairman, at Chicago; INTERGOVERNMENTAL FISCAL RELATIONS—Alfred G. Buehler, Chairman, at Washington, D. C.

Chairman Roger Freeman of the FINANCING PUBLIC EDUCATION COMMITTEE announces the first meeting of this latest study committee will be held at the conclusion of the Columbus Conference in the Deshler Hilton Hotel on October 25-26. He has so notified the members.

Executive Committee meeting

The next meeting of the N.T.A. Executive Committee will be held at the Deshler Hilton Hotel in Columbus, the morning of Monday, October 21st,—Opening Day of our 50th Anniversary Conference.

New England Tax Conference

President J. L. Reuther will speak at the Conference of the New England State Tax Officials Association, October 16-18, being held at Mountain View House, Whitefield, New Hampshire. Among other N.T.A. officials participating will be immediate Past President William F. Connelly and Executive Committeeman Lawton B. Chandler.

Indexing National Tax Journal

Editor Lawrence E. Thompson has received notification from H. W. Wilson Company of New York, that the NATIONAL TAX JOURNAL has been chosen by vote of the subscribers for indexing in the Business Periodicals Index. This will greatly aid in the search for articles on a given subject. All articles will be placed under the appropriate subject with cross references to related material. This indexing will start with Vol. XI, No. 1, which will be issued in March, 1958.

Competition

Editor Thompson has also transmitted a letter from President Alfred C. Neal of the Committee for Economic Development, stating they are conducting a competition of ideas on the question "What is the most important economic problem which the United States must face in the next twenty years?"

There will be 50 winners' prizes of $500 each. Papers are not to contain more than 2000 words and must be in English. Competition is open to anyone in the Free World. The deadline for papers is October 31, 1957. Further information, including a copy of the Rules and Regulations, may be obtained by addressing Committee for Economic Development, 444 Madison Avenue, New York, 22, New York.

Golden Anniversary Conference

Under date of August 15, all N.T.A. members were sent a communication from the Executive Director enclosing a hotel reservation card so room arrangements might be made directly with the Deshler Hilton Hotel. An accompanying notice from Secretary Ronald B. Welch gave information concerning business sessions of the Association on Tuesday, October 22nd and Thursday, October 24th, the time each day—9:30 A.M.

Letters to delegates appointed by the Governors will be mailed as soon as the list is complete. Hotel reservation cards will be enclosed.

Under any circumstances, inquiries concerning rooms and requests for reservations should be addressed to the hotel.

Preliminary programs will be mailed to all members and delegates in advance of the conference.

The usual Reception, opening the Conference, will be held in the hotel on Monday, October 21st,—late afternoon.

Everything points to an outstanding Golden Anniversary Conference in Ohio's capital city, where the first N.T.A. Conference was held in 1907.

New members

There is a fertile field for new membership in all classifications. The increased activities in Study Committees alone should be an incentive to join N.T.A.

For your convenience, there is a detachable application blank on the page following these NOTES. Just fill out the blank, attach check in the appropriate amount and mail same to the Harrisburg office of National Tax Association, as shown.

PLEASE GET BUSY AND OBTAIN A MEMBER.

WALTER J. KRESS, *Executive Director*

APPLICATION FOR MEMBERSHIP

National Tax Association
905 Payne-Shoemaker Building
Harrisburg, Pennsylvania

Date . . . .

I agree with the objectives of the National Tax Association, and authorize my enrollment as a member. As such, I am to receive the quarterly NATIONAL TAX JOURNAL and the PROCEEDINGS OF THE ANNUAL CONFERENCE. I desire my membership made effective with the quarter beginning:

Jan., 19. . . . ☐
April, 19. . . . ☐
July, 19. . . . ☐
Oct., 19. . . . ☐

and enclose my check for $. . . . . in payment of dues as

- ☐ A student in a recognized institution of higher learning . . . .$ 10.00
- ☐ An employee of a government or of a school, receiving more than half of my income from such employment . . . .$ 10.00
- ☐ An individual not coming within the preceding categories . . . .$ 25.00
- ☐ A corporation . . . .$ 100.00
- ☐ One who wishes to contribute more liberally to the work of the Association . . . . . . .Up to $1,000.00

Name (Please print) . . . .

Title or Profession . . . .

Business Affiliation . . . .

Address . . . .

Attach check payable to NATIONAL TAX ASSOCIATION and mail to:
Walter J. Kress, Executive Director, National Tax Association, 905 Payne-Shoemaker Bldg., Harrisburg, Pa.

NATIONAL TAX ASSOCIATION

Organized 1907 — Incorporated 1930

OBJECT. The National Tax Association is a non-political, non-sectarian, and non-profit-making educational organization. Its object, as stated in its certificate of incorporation, is to educate and benefit its members and others by promoting the scientific study of taxation and public finance; by encouraging research; by collecting, preserving, and diffusing scientific information; by organizing conferences; by appointing committees for the investigation of special problems; by formulating and announcing, through the deliberately expressed opinion of its conferences, the best informed thought and ripest administrative experience available; and by promoting better understanding of the common interests of national, state, and local governments in the United States and elsewhere, in matters of taxation and public finance and interstate and international comity in taxation.

MEMBERSHIPS. The Association welcomes to its membership, for mutual discussion and deliberation, all who may be interested in taxation and public finance generally. Annual dues are: memberships for students in recognized institutions of higher learning, $10; memberships for government agencies, schools, and persons receiving more than one-half of their income from employment by such agencies or schools, $10; memberships for other individuals and unincorporated entities, $25; corporate memberships, $100; persons wishing to contribute more liberally to the support of the Association, $100 to $1000.

PUBLICATIONS. The NATIONAL TAX JOURNAL is published quarterly in March, June, September, and December. PROCEEDINGS of the annual conferences on taxation which are sponsored by the Association are published soon after the meetings. The JOURNAL and the PROCEEDINGS are sent to members without charge. To non-members the price of the JOURNAL is $5.00 per year, single numbers, $1.50. The prices of the PROCEEDINGS vary; that of the 1956 volume is $10.50.

Applications for membership, orders for publications, and general inquiries should be addressed to Walter J. Kress, Executive Director, National Tax Association, 905 Payne-Shoemaker Building, Harrisburg, Pennsylvania.
